# MORTH OFFENSEAND MATURALIST

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## "THE NORTH QUEENSLAND NATURALIST"

Journal and Magazine of the North Queensland Naturalists' Club.



1. No. 1.

Oct. 1932

Hon. Editor: V. Kennedy.

te author of each article or other contribution in "THE NORTH QUEENSLAND NATURALISTS" is wholly responsible for the opinions and conclusions set out therein.

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#### "NORTH QUEENSLAND NATURALISTS' CLUB"

Rooms: Harbour Board Office, Cairns.

Business paper for monthly meeting at 8 p.m. Monday Oct. 10th 1932:

Minutes, Correspondence and Reports: Nominations for Membership.

FORTHCOMING EXCURSIONS: Members are requested to bring suggestions for new excursions to the meeting.

#### GENERAL BUSINESS.

REMARKS BY EXHIBITORS: It is desired that members having interesting specimens to exhibit at the meeting (or future meetings) should make a few remarks upon them, and furnish the hon. secretary with written particulars concerning them for record in Club minutes ot other books of reference.

#### INTERVAL: - Ten Minutes.

The Hon. Librarian (Mr. Victor Kennedy) wishes to acknowledge the following gifts to the Club's library Mr. Ike Askew: "Romance of the Animal World."
"Romance of Insect Life" both by Edmund Selous:
Dr. H. Flecker: "Birds and Blossoms" (A Sun Book) and "Proceedings of the Royal Society of Victoria (new Series)

# "THE NORTH QUEENSLAND NATURALIST."

Vol.1.

Oct. 1932.

No. I

### EDITORIAL.

The North Queensland Naturalists' Club was formed after a few discussions in which it was made clear that no corner of the Commonwealth could less afford to be without such a body. It is remarkable that no such effort was made during any pert of the last half century. True one attempt was made to found a Field Naturalists' Club and although it did not progress its very existence proved the need for such an organisation in the Far North. The need is greater today. The public is more alive to thevalues that could accrue to the social body from the activities of a group interested in the natural phenomena that abound North of the of the Tropic of Capricorn. We need only refer to the opportunities fro study offered by the proximity of the Great Barrier eef. For a century science has been intriued by the existence of coral reefs and attention has been concentrated continuously upon the thousand miles of perfection (in the way of coral reefs that runs along the Pacific coast of Queensland. For :... many years Cairns has been the base of operations for research workers from the whole world, yet, during that time there has been no organised interest amongst those living on the very fringe of the Great Barrier Reef. The Australian is perhaps as much alive as any to the economic advantages of his environment, but there is probably a disinclination to consider the asthetic importance of living. There is also a lack of knowledge regarding both those phases considered in conjunction with the Reef. · the North

Queensland Naturalists Club has been formed ro remedy that regrettable condition of public intelligence.

Besides the reef, is the mainland, Cape York
Peninsular is the actual breeding ground of fauna upon
which the eyes of the scientific world have been trained for many years. The marsupials, the birds, the
wealth of flore, the tropical jungle itself and the
geological strate all offer to the student of nature
a field that might compel his attention for the term
of his natural life.

The programme that can be placed before one interested in the Natural History of North Queensland may be exacting, but at least the stempt to carry it through would end in something dome, something handed on for the future to carry further.

The Editor.

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# THIS JOURNAL.

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The first issue of the "NORTH QUEENSLAND NATURALISTS" is a tentative essay. It was thought that the Club could not be as useful as it shouldbe unless it published its own journal of transactions. While we have to consider finance, efforts will be made to launch a printed magazine that will be self-supporting. Until that is possible, it will be the Committee's endeavour to continue a publication such as the present issue. It will contain all notices necessary for the information of members, and NO OTHER NOTICE OF THE MONTHLY MEETINGS WILL BE ISSUED TO MEMBERS. Notice of the October meeting will be found on page two of this issue.

# "ORIGIN OF THE CLUB" (By Dr. H. Flecker)

meeting of the Cairns Tableland Publicity Association in in June 1932. A discussion arose concerning the trustee. —ship of Lake Barrine, whether local trustees or trustees appointed by the Government were the more fit to preserve all the natural features of such an extremely interesting locality.

It was felt that the most capable body to advise upon the best method of preservation, would be a club, soccially interested in natural history. As no such club existed it became a matter of urgency to those who had brought the matter forward to have one established. Accordingly, at the next monthly meeting of the Publicity Association, held on July 19th, it was moved that the Mayor Mayor of Cairns (Alderman W. Collins) be requested to conver convene a meeting for the pirpose of establishing a Field Naturalists's club. It was believed that such an organisation would gratify its own members and would be of permanent to the community. The Club would not only be useful in drawing attention to the many natural feat res of the district, but could act as guides to other investigators. Besides, the members would be trained to distanguish natural phenomena and to classify them. Accordingly the Mayor convened a mereting which was held in the Cairns Council Chambers on August 19th. Those present were constituted a committee to form such a Club. A well attended meeting he held at the Harbour Board office on August 29th drew up rules, fixed subscriptions and appointed officials. The rules were formally ratified at the next meeting On Sept. 12th.

VICE)REGAL MEMBER: - While in Cairns recently His Excellency, the Governor of Queensland (Sir Leslie Orme-Wilson) accepted an invitation to become an Honorary Member of the North Queensland Naturalists Club.

perforates, such s the staghorn, cock, bracket and lace corals, housed millions of polyps in the one colony. The colony, commencing from a single animal grew by a process of budding into millions of polyps all members of the one huge family and in physical communication with each other.

Each perforation housed a separate member of the colony.

The lecturer gave an interesting account of the feeding habits of the polyps. They fed on plankton varying in size from microscopic to about half an inch and depending on ocean currents for their distribution. When the plankton touched the extended tentacles of the polyp, the impact released a hair trigger a tiny dart shot out, transfixed the prey, injected formic acid into it, paralysing it, and the tentacles closed over it drawing the food into the open mouth. Other methods of feeding were touched upon and comment was made on the socialistic spirit of the colony, one section supplying necessities to another section which, by force of circumstances, might not at the moment be in a positikn to gather its own requirement of food and oxygen.

The speaker also referred to the coloration of coral, the hydroides, other coral-like forms, and the construction of coral reefs. He concluded by appealing to members to aid the preservation of the marvellous gift of the age-old polyps to the people of North Queensland.

GREEN ISLAND EXCURSION: The first offical Club Excursivill be held on Sunday Oct. 9th when members will visit Green Island. The launch "Merinda" will leave Hayles! Wharf at 9 a.m. and will return early in the exening. I return fare will be 5/- and it is hoped that many members will participate.

#### "ARCHITECTS OF THE CORAL"

At the first meeting of the North Queensland Naturalists Club held on Sept. 12th Mr. T.P. Hoey B.A. delivered an instructive lecture upon the "Architect" of the Coral Reefs, taking the life history of the coral polyps as a basis of his discourse. The lecture was illustrated by reef specimens loaned by Dr. P.S. Clarke of Cairns.

After referring to some popular fallacies concerning the nature of coral reefs and the polyps which form the basis of their construction, the lecturer stated his intention of dealing only with a limited phase of the subject, the possibilities of which from the points of view of study and research were almost definite. Contrary to commonbelief amongst the mass of people (even those of the North) the polyp was not an insect but a piece of enimated jelly, differing from the sea-anemone by its habit of depositing a skeleton of lime through cells known as calicoblasts. Briefly, it consisted of stomach, mouth, tentacles, lime-depositing cells, and its skeleton of lime. That limy skeleton, which constituted its home and, in the case of most varieties, the linked-up homes of the whole colony of which it formed a part -- was not, as generally believed, the remains of deadpolyps but, an essential part of the body of the living pilyp. The polyp varied in dimensions from the size of a small pin head tothat: of a man's hand and could be divided into two classes the perforates and the imperforates. Quoting the mushroom (fungis) coral as an example of the imperiorates, the lecturer explained that each piece of coral housed only one large polyp. A new polyp of this type budded from the parent stem, broke off and took root on its stem where itcame to rest and, with its growth, constantly increased also the size of the lime deposit コアットナ イト

#### "AN EARLY SOCIETY"

A Cairns Field Naturalists' Club was formed at a meeting in the School of Arts on March 13th 1905 and the following officers were appointed: Chairman: E.M. Cornwall: Vice-Chairman: J.G.Fearnaley: Hon Secretary-Treasurer: E Allen: Committee: J. Hyland, D. Dean, F. Ingram, J. Anderson, J. Brewer F. Barrett. Subscription fees were fixed at 5/for adults and 2/6 for Juniors. Several excursions were held and apart from being successful were of value to science. Through investigations by the first Chairman, a fruit pigeon, until then unknown to ornithologists, was discovered in the Cairns District. On the first excursion on April 9th some rare butterflies were obtained and a dragonfly which was also new to science. Mr. J.G. Fearnaley placed the s.s. "Vigilant" at the Club's disposal for a marine excursion to Green Island on Oct. 22nd. That was a very instructive outing as was one held at Edgehill in conjunction with St: Johns' Mineralogy Class. Two papers were read to meetings - "The Rhopalocera of Cairns and District" by Mr. J. Brewer and "An Introduction to Entomology" by Mr. E.Allen who used lantern slides. Mr. Cornwallleft for Mackay during the year but before his departure he was presented with a pair of rare "Atticus" moths by the Club. A credit balance of £5-7-4 existed at the end of the year.

For the second year the officials were:—
Chairman: W.H.J.Mayers: Vice-Captain: D.Dean:
Hon. Sec-Treasurer, E.Allen: Committee: P.Hocking,
F. Ingram, J. Griffiths, E. Moody, A. Atkinson,
and J. Anderson. The Club did not live through
this year, although some of the members are still
in the district.







The monthly Journal and Magazine of the Jorth Queensland Naturalists Club.

Vol 1.40.2

November 1932

Hom. Editor: V. Kennedy

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"The North Queensland Naturalist" is for free distribution amongst members of the Club, and may be obtained from the Hon. Secretary (C/- Cairns Harbour Board) or the Hon. Librarian. Postage, one penny.

#### "NORTH QUEEFSLAND MASURALISTS CLUB"

Rooms

Cairns Harbour Board Office Lake Street

Business Paper for Monthly Meeting at 8 p.m. November 15th

Minutes, Correspondence and Reports also .. Nominations and Electio of new Members

Forthcoming Excursions: Members are always requested to bring suggestions for new excursions.

#### GENERAL BUSINESS.

Remarks by exhibiters: it is desired that members having interesting specimens to exhibite at the meeting should make a few remarks on them and furnish the Hon. Secretary (i. r.J. Wyer) with written particulars concerning them inclusion in the Clubs minutes or other books of references.

#### INTERVAL TEN MINUTES

Subject for the evening: Lecture by Mr. J. Mansky on the Ferns of Morte Queensland.

MATURE NOTES ..... CONVERSAZIONE

The notice of meeting published on this page in each issue of the "NORTH QUELESTA D ATURALIST" is the only notice of meeting which will be issued to members.

## "THEHORTH QUEEN-SLAND NATURALIST"

Vol.1.

Nov. 1932

Vo.2.

#### EDITORIAL.

The club is increasing in membership and in importance. Already in the Cairns district it is making itself felt as a force. We think that the force is one for the good of the district otherwise the club would never have been born. Unfortunately there are those who think otherwise too They resent the new body's activities as being calculated to disturb preconceptions or established ideas. Vicwing the matter dispassionately, but at the same time remaining aware of poychological principles, we reach to conclusion that the resentment is dictated by constitutional weakness in unprogressive minis which reveals itself as a fear of enything that was not done aforetime. There are other critics, of course, who · offer an homest difference of opinion and who sock to support it by logical argument. Our regret that the former class of antagonist should have influence is supported by the agitation fostered against a simple request that the natural flora of the Far North should be regarded as a heritage to be protected.A Naturalists Clue would cortainly have no right to exist if it made no spirited protest against the perpetuation of past errors in this regard the obliterating of a district's natural vegetation, and fauna, is not a weakness so much as a wickedness. It has not only its aesthetic or academic evils, but also its economic and i stellectual wrongs. The club may well go seriously into the matter of having reserves of national character actually nationalised in the matter of control. Local boards administoring stat: reserves are an amonaly. The trusteeship of such tracts and parks should be, as far as possible,

removed from any suspicion of parochial influence. These are matters that have proved to be rocks of controversy in the paths of the North Queensland raturalists Club already, but rocks, we may confidently hope, that will not be regarded as a serious menace to the safe voyaging of the ship. The good sense of the public supports the members who have also the undivided sympathy of all associations devoted to the care and study of Nature, and especially the preservation of the indigenous in our landscapes. The club is feeling its way in other directions too, and doubtless its early endeavor will be to decide upon a definite syllabus to which it may devote its consistent energies.

----The Editor.

THE LIBRARY: It is the hope of the North Queensland Naturalists Club to establish a library of scientific works for the use of its members. Naturally no great progress can be made if reliance is placed solely upon the subscription fees of members, amd consequently the Executive would greatly appreciate donations of books, papers, etc for this purpose. Meanwhile, in addition to acknowledgments in last months issue of this Journal, the Hon. Librarian wishes to acknowledge receipt of "The Animals of Australia" (a Melbourne Sun Book) Dr. from Dr. Fleckerand the "Illustrated Tasmanian Mail" from Mr. A. B. Cummings, with illustrations of Tasmanian Native Flowers.

#### CLUB EXCURSIONS.

The Club has conducted two field excursions since its formation, although as far as numbers were concerned neither excursion was satisfactory. The second outing was held in conjunction with the Cairns Alpine Club when the number of Naturalist Club members was larger than on the first excursion. As most of them belonged to both clubs. the capacity in which the majority attended was in doubts However the result was as desired. An instructive outing. was enjoyed on each occasion, members bringing back

interesting natural specimens for study.

Green Island Excursion: This was the first Club outing and took place on October 9,1932 in glorious weather. The moon had reached the forst quarter two days earlier, so the tide was low during practically the whole of the time the party was on the island. The attendance of visitors was much greater than that of club members. but numerous apologies for unavoidable absence were received from members and indicated that larger attendances could be expected at future excursions. An inspection of the outer edge of the reef was made first and the coral on the far side noted in all its wonderful. beauty and vvariety ofform. Various other zoological forms molluses, crabs, echinoderms, holothurians, starfish and a host of other creatures were noted. The Fungia Danai, the single large mushroom coral, was particularly examined as it differs from the other corals in as much as its brown tentacles were extended in broad daylight, giving the organism a totally different appearance to what it bears when dry. A very unusual sight was that of a large babler shell (Melo amphora) extending a large mass of eggs capsules almost as large as itself. The egg capsules were comented together into the form of a large hollow cylinder with the consistency and the appearance of cartilage. Excursion to Buchan Foint: The second

excursion, that combined with the Alpine Club, was held on October 16. The weather was again very fine, the omribus taking members through the scrub north of the Fairon River where attention was drawn to the vividly crimson flowers of the mistletoe (Loranthus) growing on the tall gums. The conveyance halted at a point on the beach a mile or so beyond Buchan Foint. The party then walked onward. Objects on the coach, such as shells, were much battered and of no great variety but the vegetation was of decided interest. The very handso e golden orchid (Dendrobium undulatum) was a ted growing on some of the granite boulders. The white flowers of the wild jasmine were in bloom and many other plants unknow by name to the majority of members were seen.

It is hoped that as these excursions become more popular, members will have a petter offortunity of identifying many of the more common yet beautiful

trees and shrubs.

## The Club Officials.

The following officials were appointed at the first governl mosting of the North Queensland Naturalists Club on Sept.12,1932:-

resident: Dr. H. Flecker; Vice-presidents: Capt. W. T. Fish and Hiss Hooper; Secretary: J. Wyer; ExcutavesCommi with liss M. Hall and r.M.J. Mansky . Treasurer R.J. Gorto Jibrarian and Editor: Victor Kennedy.

The executive committee meets on the first hone in each month and the general meeting of members is held on the following (the second) sonday, at 3 p.m.

"ITHICRY AND I ROTECTIVE COLORATION OF LESERTS"

the Morth Queensland Maturalists Club was occupied by Frotective Coloration and Minicip in Thee Protects.

Allusion was made by the lecturer, after he had complimented the Club upon its decision to organise for its stated purpose, to the rofining influences. induced by contemplation of the beauties and wonders of annimal and plant life, and especially to the wide scope for nature study afforded by the tropicalsurroundings of Cairns. Of the supposed three-quarter willie as of spacets said to occur on the corth, he said not one of plant or insect had yet received exhaustive study. The origin of coloration of insects was eithor structural or pigmental or a combination of both. To the combination was due the irridescent and metallic tints. Protective coloration related to the adaptation of a color scheme by an insect to its nesting place or environment in such manner as to render it almost invisible to its enemics. Examples were the grasshopper, moth, and leaf butterflies. Species ware fixed although varieties of them may be produced by natural selection or artificial selection. Instances of artifical selection in plants were double apples and roses from the com on dog rose or crab apile. The lecturer also referred to the question of reversion to the parent species by these plants, as was believed by Darwin and other Naturalists, should man suddenly cease to foster and cultivate thom. He also discussed the protective coloration in Queensland insects such as the burk mantis, "stick insects"plant bugs and pootles. There were also Warning colors, usually cardinal red, vormilion, orange, carole or combinations of yellow and black, red and black, or vivid olub. They were seen in assassin bugs, wasps, and insects that were nauseous to the taste. There were also the

warning colours in the caterpillars of insects; those of large hawk moths that so resembled small snakes that little birds mistaking them for snakes flew away frightened by such defensive characters and by the "eye" spots of warning coloration. Many insects were also armed with stinging hairs of a poisonous nature. He referred also to a moth, very common in Victoria, that frequented parts of the bush through which bushfires had cone. The coloration was such that as they came to rest upon the burnt bark or stunp of a tree it could hardly be distinguished from the surroundings.

The lecturer illustrated his remarks with cases containing insects in situ on protective surfaces of bark, leaves, etc., the Indian leaf butterfly and insects adorned with warning colors.

#### NATIVE PERMS

At the last meeting of the N.Q. (.C. Mr. I.)

masky brought forward a matter that might well be

considered further, especially by the local
authorities in the Cairns District. He said no had
been up the gullies at Mount Whitfield and noticed
that, of the magnificent King Ferns that grow
luxuriously there at one time, hardly any remained. He
proposed that the Government department might considered
the protection of all forms a domight is sue licenses
bona fide collectors for the carrying away of ferns
orchids, etc., from the Morthern Scrubs. The licenses
would be a source of revenue and would also minimise
the careless or wanton destruction of the of the nat
plants. The desirability of replanting native ferns
place of those that once thrived was also discussed.







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NORTH

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THE MONTHLY JOURNAL AND MAGAZINE OF THE NORTH QUEENSLAND NATURALISTS CLUB.

Vol. 1 No.3

December 1932.

Hone Editors

V.Kennedy.

The author of each articleor other contribution in the "NORTH QHEENSLAND NATURALIST" is wholly responsible for the opinions or conclusions set out therein.

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North Queensland Naturalist Club Current Subjects The Library Club excursions The Club Officials "Ferns"

"The North Queensland Naturalist" is for free distribution amongst members of the Club, and may be obtained from the Hon-Secretary (C/- Gairns Harbour

#### FERNS OF NORTH QUEENSLAND.

The lecture adjournment at the November meeting was occupied by Mr. M.J. Manski of Cairns, his subject being "The ferns of North Queensland."

Beginning with the various uses to which ferns could be put to, he explained how ferns were classified and identified, giving Class, Order, Tribes, Genera, Species and varieties,

Ferns belong to Class Acotyledon, order Filices and he stated that belonging to class Acoty-ledons they possessed no true leaves and order Filices, no real flowers. After explaining how the frond is made up, the lecturer placed the genera into their respective tribes, and by means of pressed fronds he explained the species and varieties of each genus obtained about the ranges of Trinity Bay and gave the meanings of the names in each instance.

The lecture though long was very interesting and the lecturer concluded by stating that the Lantana is fast making inroads to our fern gullies and it will only be a matter of a few years when no ferns would be obtained in the Trinity Bay ranges, and suggested that Licenses be issued to Bona fide collectors who would cultivate the species now in danger of extinction.

that be have consistency neglected to cultivate this ferm, with fronds 15 feet long, and one of the finest in existence, in the public parks and gardens. It is to be hoped that this state of affairs will not last long.

OTHER HOUSE

BEARERS.

President: Dr. H. Mecker; Vice-Presidents: Capt. W.P. Fish and Miss Hooper; Secretary: J. Wyer; Executive Committee with Miss M. Hall and Mr. M. J. Manski; Treasurer: R.J. Corton Librarian and Editor: Victor Kennedy.

The edecutive committee meets on the first Monday in each month and the General Meeting of members is held on the following (the second) Monday, at 8 p.m. CLUB

EXCURSIONS.

The third excursion conducted by Club took place on November. 20th, as described below. It was considered appropriate to follow up the lecture given last meeting by Mr. Manski on "Ferns", by an excursion to Collins Gully, Edge Hill, where ferns may be seen growing very profusely, and notwithstanding the ravages that the Lantana pest is causing, the party were keenly interested in the trip.

On the way an opportunity was taken to inspect the massive proportions of a six year old growth of Bougainvillea completely hiding from view a shed which it covered as well as burdening half the height of a hoop pine 40 feet high, and it can easily be imagined what a poor chance the bush would have of surviving if such growth were permitted in its midst. An extraordinary contrast of the barren western hills of the small range which has been almost completely devastated by the lantana curse can easily be compared even by the most casual observer to the rich tropical vegetation of the gullies further east. It is indeed sad to think that in only a very few years these same luxuriant gullies will be doomed to the same fate, as the lantana is rapidly advancing. The bush fires, marked with extraordinary indifference by the local population, are no doubt in a large part responsible for this terrible state of affairs.

Yet in these gullies at the driest season of the year is a wealth of interesting vegetation and fauna, especially insect life, the beautiful butter-flies, being to the nature lover an unending source of delight. The truly majestic king fern (Murattia fraxinia) is growing here in all its magnificance, and it seems very extraordinary that the powers

#### T HE LIBRARY.

It is the hope of the North Queensland Maturalists Club to establish a library of scientific works for the use of its members. Naturally no great progress can be made if reliance is placed solely upon the subscription fees of Members, and consequently the Executive would greatly appreciate donations of books, papers, etc., for this purpose. Meanwhile, in addition to acknowledgments in last month's issue of this Journal, the Hon. Librarian wishes to acknowledge receipt of "Flora of N.S.W." by Moore, from Dr. Flecker, President of Club; also a very handsome gift of 6 Vols. of "Flora of Queensland" by Bailey, from the Department of Agriculture and Stock; also "Timbers of Queensland" by Swain, the gift of the Forestry Department.

For the information of Members, the Launch Morinda, will leave for Cooktown on Saturday 24th. December at 7 a.m. and returns about 6 p.m. on Tuesday 27th December.

Return Fare 30/--

#### CURRENT SUBJECTS.

The Club has taken up with the City Council the question of establishment of a "Museum" for Cairns. In a city of the importance of Cairns and the centre of the winter tourist traffic in Australia, and with such scope with the Bairier Reef so adjacent and the numerous varieties of Timbers and Minerals on its Tablelands, as well as other specimens of local tropical interest etc., there is every reason why a Museum should be established and it should be cayable of being one of the best in the State.

A conference between the Club and City Council has been set down for 14th. instant.

## TOURIST GILLS.

This also is a matter that the Club has taken up with the City Council, as the need of guides in connection with trips to the Great Barrier Heef, in particular, as well as elsewhere, is at present a long felt want.

#### BRAUTIFICATION OF MORNAN PARK.

This is also another matter which the Club are moving in and it is to be hoped that in the near future the City Council will be able to do something towards beautifying this Park, which is in the centre of the City, and which at present does not present a very attractive appearance, but it is hoped that before long this Park will be laid out and planted in a manner that will be an ornament to the City.

#### "NORTH QUEENSLAND NATURALISTS CLUB"

Rooms at Anzac Club Esplanade, Caimns

Business Faper for Monthly Meeting at 8 p.m. December 12th, 1932.

Minutes, Correspondence and Reports also Nominations and Election of new Members.

Forthcoming Excursions: Members are always requested to bring suggestions for new excursions.

#### GENTAL'S BUSINESS.

Remarks by exhibits as It is desired that Members having interesting specimens to exhibit at the meeting should make a few remarks on them and furnish the Hon-Secretary (Mr.J. Wyer) with written particulars concerning their inclusion in the Club's minutes or other books of references.

#### INTERVAL TEN MINUTES.

Subject for the evening: Lecture by Mr. J. Harold Smith, B.Sc., Entomologist, on "The character of Rain Forests"

NATURE NOTES

The Notice of meeting published on this page in each issue of the "NORTH QUEENSLAND NATURALIST" is the only notice of meeting which will be issued to members.

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THE NORTH QUEENSLAND

NATURALIST.

The official Journal and Magazine of the North

Vol.1 No 4.

2 MAY 10.55

MUS JUM

VICTORIA

Jan. 1933.

#### Hon. Editor -- V.Kennedy

EDITORIAL -- With the advent of the new year, the work of the North Queensland Naturalists Club is likely to receive an impetus that will result in the registering of greater knowledge of the natural phenomena of the Far North. Even though many scientific expeditions and isolated individual studies have been carried out since North Queensland was settled, much of that work has remained within the obscutivy of scientific journals, read and known only by the very eager. With the active, well-directed interest of a Club yielding continuous results, that information and new facts will be more generally diffused and interpretated. The past months have seen the Club emerging from its infancy

Page 2.

and the beginning of 1933 sees it ready for work of

a more definite character. It now has a programme.

### THE NORTH QUEENSLAND NATURALISTS CLUB.

Meeting Room: The Anzac Club Rooms, Esplanade, Cairns.

General Meetings are held on the Second Monday in each month at 8 p.m. and the Committee Meetings are held on the first Mondays at the same hour.

Owing to the intervention of Xmas and New Year Vacation the January meeting will be held on the THIRD MONDAY,

January 23rd,1933.

Agenda Paper, Minutes, Correspondence, Reports, Romination and election of new members (new members nominated at one meeting shall be elected by ballot at the following general meeting.)

Excursions- Members are invited to submit plans or suggestions for Club field excursions at the general meetings.

Exhibits. It is desired that members having interesting specimens to exhibit at general meeting shall also make a few explanatory remarks upon them and hand a written summary of the remarks to the secretary (Mr. J. Wyer) for inclusion in the Society's books. This request is also made to lecturers at the meetings. Lecture adjournment -- After the ten minutes interval at the Jan. meeting. Rev. E.R. Gribble will deliver a lecturette upon THE ABORIGINES OF AUSTRALIAR.

Club Officials: President: DR.H.FIECKER; Vice-Presidents: CAPT.W.P.FISH and MISS HOOPER: Secretary MR. J.WYER: Executive Committee: the foregoing with the addition of MISS M.HALL and MR.H.J.MANSKI: Treasurer: R.J.GORDON: &ibrarian and Editor: V.KENNEDY. The Executive Committee of the Club is making beadway with the proposed establishment of a Museum in Cairns and with the appointment of effectively trained guides at Green Island. They have the cooperation of the Cairns City Council and it is hoped that the both projects will become facts in the new years

## RATH FORRETS.

At the last necting of the Olub, an interesting lecture on "Rain Forests" was delivered by Mr. J. Harold Smith, M.Sc. The following is a summary:-

Rain forest is a term descriptive of the dominant floral association in tropical countries where the rainfall is high and more or less evenly distributed through the several months of the year. In Australia it is limited to the eastern seaboard, reashing its climax in North Queensland, but persisting in an attenuated form as south as Tasmania. Given sufficient rain and adequate temperatures, its development is less dependent on soil conditions than in temperate parts of the continent. The association can be conveniently divided into the following sub-groups:-

(a) Intermittently inundated forest, which includes mangrove swamps, where the Rhizophoraceae dominate, swamp jungle characterised by the cabbage palm and some species specialised to withstand periodic immersion, and palmswamp, dominated by Archontophoenyx, usually located where there is a

seepage of some kinds

(b). Higher lying forest, which makes up the bulk of the virgin country. The main features are the extraordinarily wide range of orders and genera in an area without any one being sufficiently common to be dominant in the real sense of the word, while

lianas stretch down in profusion from the crewns of the tree to the ground. Epiphytes are common, and these three essential constituents to the rain forest flora-provide an environment which is highly favorable to a rich faunal development concentrated for the most part in the crown of the trees. Such a fauna subsists mainly on the fruits which occur over a considerable period of the year, and the white ants, a necessary source of food for most of the insectivorous birds. These white ants differ in their habits from the more familiar forest types for the mound-forming habit has been lost if ever it was developed, and the extant rain forest species live almost entirely on the trees within the shelter of their burrow system.

There are several peculiarities of the rain forest flora which distinguish it from other botanical associations. Buttress roots are a case in point, together with such subsidiary characteristics as flanged stems. The functional value of these morphological curies can only be conjectured for the old view that they mechanically assist in the support of the bole is newadays discarded by most botanists conversant with the subject. Others include the goveral absence of those genera which contribute se largely to the savannah flora, though one or two Acadias have been recorded from rain forests; and a single Eucalypt, Etorelliana, may be found in certain areas of rain forest in Naqueensland. These are, however, the exception. Our dominant orders in the North are the Protesceae, Rutaceae and the Lauraceae It is curious that the Flindersias should belong to the Rutaccae, most species in which are more or less of the shrubby type. Ferhaps this will ultimately prove to be a botanical misfit, which will be climinated as the systematics of rain forest species are more thoroughly worked out.

### Paga 5.

The rain forest of North Queensland is a special floral development which has never received that the study which its importance warrants. Consequently a considerable number of species are almost unknown, and systematists cannot find a better playground while those whose minds are east in a different mould cannot but find material to interest them in any biological field.

#### LIFE HISTORY OF CYNTHIA ARSINOE ADA.

## (By M. J. Manski)-

As the life history and food plants of a number of species are obscure, science can be aided by the keen observer and with this object in view I relate my experience of one specie, "Cynthia Arsince Ada" whose life history has not yet been described (see page 91 No 7 "What Butterfly is that"). Whilst collecting at Stratford on New Years Day I noticed the female hovering over the wild passion vine (passiflora Foctida) My suspicions being aroused I watched its movements and presently it flew into the lantana which supported the vine and alighted on a thin dried stick of lantana and suspending itself underneath the twig, deposited an egg on it and then flew to another plant in the lantana and repeated the performance. This egg I obtained. Sitting on my back steps next morning I noticed another female Cynthia depositing eggs on the dried tendrils of the Granadilla vine (Passiflora Quadrangularis). This performance occurred several times

## Page 6.

During the day and on examination, I counted 36 eggs in all. 10 eggs being laid on one frail dry tendril.

Tying a coloured piece of cotton on a tendril to mark it, I was sumprised to see next afternoon 3 eggs were deposited on the cotton. He couldn't desire the food plant.

When first laid the aggs are white in colour but within twenty-four hours become semewhat darker and are then a pearly gray. They are evoidcylindrival in shape, about 1.5mm long by 1.2mm in diameter, and are combated to the substratum by one end - i.e. the longer exis is perpendicula to the surface on which the eggs are deposited As is generally the case with the eggs of this group the chorion exhibits characteristic external soulpturing. The done is marked out in irregular polygenal depressions and the sides are longitudinally striated by raised lines which are joined at regular intervals by less pronounced transverse ridges. The transverse ridges of adjacent rows are opposite one another. The sides are thus marked off into quadrangular depressed areas regularly arranged in a series; of rows from shoulder to base the whole way round the circumference of the egg.

#### To be continued:

#### NOTES BY THE WAY.

The Club is proceeding with the appointment of guides on Green Island and the Barrier Reef. The idea sprang from consideration of the lack suffered by visitors in the absence of effective guidance. The Club proposed to appoint guides,

train them efficiently and, in collaboration with the City Council of Cairns, to issue tickets to visitors by which they could obtain the service of such a guide. The matter is stall pending, although the Club has gone so far as to call for applications from those willing to act. The response was very satisfactory and a trial trip will be made to Green Island on Sunday Feb. 5th. All intending guides are asked to be in attendance so that the first lesson may be well learned. By the commencement of the next tourist season, it is hoped that a body of men thoroughly trained in the marine life (especially the coral) and the flora of the island will be at the disposal of the visitors.

A party comprising the President and Editor of the Club, the secretary of the Cairns-Tableland Publicity Association and others accompanied the Harbour Master (Capt. J. Brewster) to Oyster Cay and Upolu Bonk a fortnight ago. The origin of the visit was a report that maimed birds had been seen on the island and that wilful destruction had become a common practice. On this particular visit no evidence could be found to justify the statements, although there is no doubt that such things do occur. One of the many aims of the Naturalists Club, therefore, will be to have this island bird life protected.

Another outcome of the visit was a determination to protect the cays themselves. Some time ago licenses were issued to persons to take coral sand from below high water mark. The work on Cyster Cay was never commenced, but that on Upolu Bank was carried out so effectively above high water that a great part of the cay and its vegetation has gone.

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Amongst the early activities of the Club was its public protest against the planting out of exotic shrubs and trees in the jungles, and on the ranges The objection had particular reference about Cairns. to the planting of bourgainvillea on the Cairns-Kuranda range when, it was argued, there were numbers of native trees quite as beautiful and more distinctive. The agitation came within the scope of the Naturalists Club which had the preservation and exten -sion of natural flora of the Far North at its heart. The protest encited a controversy in which, it was noted, horticulturalists were very prominant in challenging the Club. They were ably assisted by professional plant sellers. The Club's main fear however was (and is) that the native charm and character of the Tropical North, with its already unrivalled profusion of glorious flora, was to be destroyed by the introduction of alien blooms that, beautiful in themselves, would merely perpetuate the landscapes of other places. Given that, and the now particular appeal of the tropics would vanish as it has elsewhere. The Queensland Naturalists Club (Brisbane) expressed its approval of the new Club's protest and suggested that amongst the many beautifully flowering trees, indigenous to the Far North, that could be utilised for the beautifying of the "bare patches on" the range" are such as the Flame tree, Theel-of-fire, Native Cassia, while palms would add the necessary atmosphere of the "tropics", which many tourists come north annually to find. The controversy died down somewhat but has been revived recently by press correspondence, (mostly anonymous). Some of the correspondence, unfortunately sprang from members of the Club who were present at the meeting but neither voiced their disapproval nor voted against the motion originally carried. The critics were effectively answered by the president of the Club (Dr. Flecker) at a recent meetingo





## THE NORTH QUEENSLAND

#### NATURALIST.

The Official Journal and magazine of the North VICTORIA

Vol. 1 No 5.

Feb. 1933.

#### EDITORIAL.

A non-member of the N. W. Club has asked why so much interest is devoted by the Club to Green Island, to the neglect of other forms of Nature's manifestation. Well it is not correct that those other forms are neglected; it is the Club's ambition to gather a force of interested investigators to give prolonged study to North Queensland as a whole. Just now most interest is attached to the reef because of recent-day scientific study and because romance also draws minds other-wise uninclined to careful study. The reef has a unique importance in the whole world of study in all the branches of geology, biology, botany, and general marine study. Its economic importance also add an army of knowledge seekers nowadays.

## THE NORTH QUEENSLAND NATURALISTS CLUB.

Meeting Rooms: The Anzac Club, Esplanade, Cairns.

General meetings are held on the second Monday in each month and committee meetings are held on the first Monday, both meetings at 8 p.m.

Agenda Paper--Minutes, Correspondence, Reports, Nomination and election of members (New members are nominated at one meeting and cleated by whit ballott at the following monthly meeting).

Excursions - Members are invited to submit plans and suggestions for outdoor excursions to the meetings:

Exhibits -- It is desired that members having interesting specimens to exhibit at general meetings shall also make a few explanatory remarks upon them and hand a written summary of the meetings to the Secretary (Mr. J.Wyer) for inclusion in the Club's books. This request is also made to the lecturers at the meetings.

Lecture and adjournment- After the ten minute interval Dr. P.S. Clarke will deliver a lantern lecture upon "The Fishes of the Great Barrier Reef."

Date of Meeting ---- February 13th, 1933.

CLUB OFFICIALS: President, Dr. H.Flecker; Vice-Presidents, Capt. W.P. Fish and Miss Hooper; Secretary J. Wyer: Executive Committee, the fore-going with the addition of M.J. Manski and W.M. Grant; Treasurer, R.J. Gorton; Editor and Librarian, Victor Kennedy.

#### THE AUSTRALIAN ABORTGINES.

The lecturer at the January meeting of the Club was the Rev.E.R.Gribble of Palm Island.Mr. Gaibble came willingly to Cairns to lecture upon a aubject dear to his heart, and one to which he has devoted a great deal of energy outside the ordinary routine of his missionary duties. Mr. Gribble has spent over forty years amongst the natives of Austra alia. He succeeded his father as director of Yarrabah Station a few months after his father had astablished the mission. Subsequently he was in charge of natives in N.S.W. Cape York and the Kimberlies (Forrest River) The lecture was illustrated by a number of fine slides of his native charges at these centres. The lecturer also illuminated his address with anecdotes reflecting the native humor of the aborigines. A great portion of the address was devoted to the social life of the aboriginals under civilisation but there were many reflections upon the life and character of the myalls. A special interest attached to the life history of the several races in Australia with the speaker's theory of their arrival from the North-He drew for his facts upon the uses of different weapons, the females of the tribes and the arrival of a race with a domesticated dog-all well marked features of zonal studies in Australian settlement. The respective merits of white and black settlement were also touched upon. The speaker warmed to a condemnation of certain phases of the white. man's occupancy of the territories of the original inhabitants. One fact stood out of the lecturer's analysis, that the so long despised Australian native was far more worthy of respect in regard to his intellectual status than generally had been conceded. Although it was late to commence, it appeared that ethnology had a great deal to learn by the inclusion in comparative study of the aborigine. The moral and social codes of the native in the wild state had many features worthy of admiration.

age 40

#### LIFE HISTORY OF CYNTHIA ARSINOL ADA

(Continued) By M.J.MANSKI.

The egg laid on January 1st 1933 hatched cut at 8 a.m. on 4th and those laid on 2nd hatched out at 5 p.m. on 4th. The young larvae did not eat the egg shell on emergence, are very lively and spin silk to hold on to the leaf. They have smooth shiny black heads with some segments white and others spotted brown and in structure resemble the general type of numphalinal except that the bottoms of each segment have hairs and a pair of fleshy tentacles tipped with spine-like hairs on each side of the thorax segments.

Of the larvae placed on the food plant in the open, none could be found next day. Those I left on the tendril of vine never left the tendril but shrunk up and died. Those I placed on food plant under cover I noticed ate the young leaves for a period of 3 days but did not thrive much and gradually died off until none remained.

On examination through a lens, I discovered that the larvae had been attached by a mite or minute parasite which accounted for their not eating

after a few days and dying off.

Thus my first effort has failed to produce the larvae through their instars to the pupal stage, but the next effort I expect success as plants will be free of parasites before larvae are placed on it.

## GREEN ISLAND FLORA.

The following list of the Green Island flora was drawn up by the Cairns City Council at the request of the N.Q.N.Club. It is the first systematic

Page 5.

effort ever made to catalogue all the plant forms of the island 2 -

Termanalia catappa

Ficus infectoria Ficus Pilosa Premna obtusifolia Cordia subcordata

Thespesia populnea Pongamia pinnata

Sideroxylum obovatum Calophyllum inophyllum Pithecolobium lovalle

Cocos australis Ptyshosperma elegans

Myristica insipidia N.Q. m Brassaia aclimophydla N.Q. un Flindersia ifflarana Hickory Casuarina Cunninghamiana Sheoak Erythrina Indica Red co:

Pandanus pedunculatus
Melia composita
Tpomea pescaprae
Passiflora herbertiana
Cuscuta australia
Hibiscus tilaceus
Tournefortia argentea

Commonly called Date Plum with large leaves & branches growing at right angles to trunk Giant fig. Large fig with pretty red Native Elderbery tree. Fruit. A beautiful shade tree with delightful salmon flowers. A large tree. The best shade tree on the Tsland. Large tree that stands wind well. Alexandra laurel Large tree with circular, corkscrew pods. Coco-nut palm. A nice palm peculiar at end of leaves. N.J. nutmeg. N.Q. umbrella tree. Hickory, two or three specimens Red coral tree, enormous specimens. Bread fruit (Miscalled) White cedar Beach convolvilous. Wild passion fruit Dodder vine. Wild hibiscus. A green shrub gnowing near end of jetty with poculiar flowers like pieces of centiflowers.

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## Page 6.

Morinda citrifolia

Guettarda speciosa

Sophora tomentosa 

Scaevola konigii.

Macaranga tanarius 

Imperata arundinacea: Blady grass Comulus mullerii

A very large leafed shrub or small tree. White flowered shrub bearing a white large fruit 'like a Large potato. A small leguminous shrub bearing bluish green bean poda.

A green shrub with hand like kear leaves growing in profusion along beaches Large leafed soft wooded amall quick growing tree something like candle-nut woods ... I my them.

Rhynchosia cunninghamii A vine with peacock blue beans Lanyer cane.

# WILD NATURE SHOW

The committee at a recent meeting decided to recommend the conducting of a Wild Nature Show in Cairns, preferably in the artistic Council Chamber. The theory is not new as such shows are held with great success in other parts; but it would be new to Cairns. For that matter alone it should be pushed forward because there is an amazing lack of knowledge concerning the remarkable variety and beauty of the wild flora in this district. It would also serve to promote a sense of proportion in the minds of those who are now scarching the world for the "best that it has" in order to beautify the Far North. There is necessity apparently to point out that indigenous flora anywhere is " the best

in the world" of its kind, and the time is always opportune for cultivating it. Take such a fern for instance as the King Fern (Marattia fraxinia). Here within the immediate environs of the city are the world's best" specimens of this already "World's best" fern. Fine King Ferns with branching fronds twenty feet long. Then also is the wealth of form and color that can be garnered from the scrub to embellish any wild show. Such an exhibition, properly conducted, will be merely another effective medium for the advertising of this wonderfully fertile and colorful North of Queensland.

Connected with that is a suggestion that the Cairns Show Committee set aside space for the holding of a native plants section at the forthcoming general show. Both suggestions could well be carried out to the ultimate benefit of the North.

#### THE WAY. NOTES BY

It was arranged that a trip be made to Green Island on February 5th in order to initiate the guides in the observation and naming of the fauna, so that they may be properly equipped to instruct visitors during the tourist season. The weather however, intervened and the trip had to be postponed until Sunday, Feb. 26th. All interested are again reminded of the tripe.

The Club's proposed museum is so well on the way that the club is arranging for the construction of suitable cases for the specimens. Toral and shells are chief of those already collected. As the Cairns City Council looks with beneficence upon the scheme and the R.S.S.I.L.A. have provided temporary premises in their Club House, the nucleus of a Far Northern Museum seems to be well established.

## Page 8

assisting. A sub-committee from the N.J.N.C. is assisting the City Council in an advisory capacity in beautifying of Norman Park. Their particular work is the suggesting of native trees to be planted out. It is the first attempt in the Far North to give definite official preference to indigenous flora although the present composition of the Cairns City Council is such as to give hope that this effort will not be the last. When the native trees are in bloom, they will speak for themselves as city beautifiers.

Mr. Leslie Wright, City Curator (Botanic) of Cairns has been appointed a ranger (Protection of Birds and Animals Act) of the islets and Cays in Michaelmas and Arlington reefs. While this is satisfactory, it is still to be hoped that a ranger may be found with a boat and who can visit the reef often.

The Club is endeavouring to get into touch with Mr. Zane Grey, the celebrated author who is visiting Australia. Mr. Grey is a noted fisher of big fish and in pursuit of them he proposes to extend his launch cruises to North Queensland. The club proposes to enlist him into service as a lecturer during his stay. The Club is also inviting Mr. Vance Palmer to deliver a lecture while he is again in the North during the year. Both authors are students of Nature in its many phases.







### WATURALIST.

The official Journal and magazine of the North Queensland Naturalists Club.

Vol.1 No 6.

March 1933.

#### PROGRESS.

Speaking generally and in regard to the administration of the Club, we may say that there has been definite progress during the past month. The Committee has dealt with a number of matters with manimum In si wat a particular Il success. There was the establishment of a museum in មានជាមាន ១១៥៣ ខ្លាំង សេញ៉ា ស់ក្នុង សេចមើ Cairns, which has won the ear of the City Council and a number of timber people and cabinet makers in the contraction of the second of the contraction of the second of the contraction of t are donating the cases. The matter of Guides at The second the feet of the control of the Green Island is referred to in this issue and there is a project (half completed) of publishing a Guide Book to Green Island which will embrace the geology as well as the many other features that make it of Park to the state of the state interest as a Coral Island. The Club is offering a book prize also for the encowragement of School child naturalists. A good working syllabus.

#### THE NORTH QUEENSLAND NATURALIST CLUB.

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interesting specimens to exhibit at general meeting shall also make a few explanatory remarks upon them and hand a written summary of the remarks to the Secretary (Lir. J. Wyer) for inclusion in the Club's books. This request is also made to the lecturers at the meetings.

Lecture and adjournment - After the ten minute interval Hr.V.Kennedy will deliver a lecture upon "Geology of the Barrier Reef".

Date of Meeting - Monday March 13th, 1933.

CLUB OFFICIALS: President, Dr. H. Flacker; Vice-Presidents, Capt. W.P. Fish and Hiss Hooper: Secretary, J. Wyer: Executive Committee, the foregoing with the addition of H. J. Manski and W.H. Grant: Treasurer, R. J. Gorton: Editor and Librarian, Victor Kennedy.

A problem that continues to interest geologists is the original course of the Mulgrave River and the beginnings of the Cairns Inlet. The inlet runs directly into the coast between two mud flats and as it widens a mud island (Admiralty) arises in its delta. Then the apparent stream stops abruptly and becomes merely a sea inlet. Continue the line along the alluvial valley from the head of the Inlet and you come upon the Mulgrave River which has been at some time diverted southward in a peculiar manner to join the Russell River. Both flow into Constantine Bay together forming an estuary "curiously inhdequate to the capacity of such strong streams" according to the late Chas. Hedley F.L.S. North of Cairns the Barron River has been powerfully building up its delta in Trinity Bay. Yet despite its power and the undoubtedly long period in which it has been working, there is more alluvium in the Cairns Inlet(C. Hedley's "Riverless estuary") than the mighty Barron River has deposited. At some time a river must have found its way to the sea through that Inlet. The view of W.H. Bryan supported by Hedley was that the Mulgrave River entered at that point and continued through the reef at Trinity Opening near Cairns.Dr.R.L.Jack suggested that the Mulgrave has been turned from its original course by a flow of basalt. Hedley however, substitutes for the basalt flow a volcanic eruption which threw up Green Hill into the ancient course of the Mulgrave. Dr. J. V. Danes has also formed the same theory, independently of the other investigators. His Ala region des Rivieres Barron et Russell" was published in Annales de Geographie in 1912.More recently, Dr. C.H. Yonge, discounted the Mulgrave as the origin of Trinity Passage although that it originally flowed into the Inlet seems to be proven.

#### BIRDS OF THE GREAT BARRIER REEF.

Chief amongst the many attractions of the GreatBarrier Reef are the thousands of birds that breed on its cays and islets. The following list is taken from a paper by W.B. Alexander, M. ..., Vice-President (at the time) of the Royal Australian Ornithologists Union, and Corresponding Fellow of the American Ornitholigists Union:

Wedge-tailed Shearwater (Puffinus Bacificus)
breeding on Rains Is. Willis Is. and the Capricorn group
Booby or Brown Gannet (Sula leucogaster) Booby Is.

Bramble Cay, Ashmore Banks, Raine & Willis Islands.

Masked Gannet (Sula dactylatra) Raine & Willis Is.
Red-footed Gannet (Sula piscator, Raine Island.

Lesser Frigate-bird (Fregata ariel) Raine Is.
Red-tailed Tropic bird (Phaethon rubricaudus)

breeding on Raine Esland.

Noddy Tern (Anous stolidus) Bramble Cay, Raine & Willis Is. Upolu Reef, Howick Is. and Oyster Cay.

White-capped Noddy (inous minutus) Quoin Island

and the Capricorn Group

Wideavake or Sooty Tern(Sterna fuscata)Booby
Is, Bramble Cay, Raine & Willis Is., Upolu Reef, Oyster &

Brown-winged Tern (Breeding on a great number of islands from Torres Strait to the Capricorn Group.

A number of others associate with the for egoing and include:-Caspian Tern(Hydroprogne caspia) Crested Tern(Sterna bergii) Lesser Crested Tern) Sterna bengalensis) Black-naped Tern(Sterna sumatrana) Roseate Tern (Sterna dougalli) Little Tern(Sterna albifrons) and Silver Gull, (Larus novachollandiae). These, however, are found on the coast throughout the year while the ten above-mentioned disperse over the oceans except during breeding season.

#### GUIDES ON CREEN ISLAND.

The official trip was nade to Green Island on Sunday February 26th. It was the first instructional trip and was the means of advancing the proposed guide service another step. Those present included the President (Dr. Flecker) Mrs. McManus, Miss Hooper; Messrs.W.H. Grant, W.H. Coleman, A.W. Malton and G.L.Mills.Several apologies for unavoidable absence were also received. In perfect wather the receding tide, was nevertheless rather high so an inspection of the vegation was made. It was noted that the Club's request to the City Council to preserve the undergrowth had been faithfully carried out. Although many of the plants were identified many more were not. It is hoped that ere long labels will be placed on some of the trees. Wading out to the reef enabled the party to inspect the various kinds of coral fish live shells, crabs, sea urchins, beche-de-mer which exist so plentifully on the reef. Unfortunately, as the tide was at its lowest it was time for the visitors to depart for Cairns. This consideration of the tides is one . that will engage much attention in future tourist seasons-..... The guide service proposal was pushed further at a meeting at which Mr. Charles Hayles of the "Merinda" Green Island service met a "Club Sub-Committee comprising Dr. Flecker, J. Wyer (Secretary) and V.Kennedy. Mr. Hayles was cordial and volunteered much useful advice-It was established that the Club and Hayles Bros.could cooperate in the matter. There were several features of the service that, it was agreed would be of mutual advantage ... . A suggestion that came out of the meeting was that the Club approach the Council for permission to take over, stock and run the museum at present on the Island. The Club could place one of its guides in charge and so make the museum an attraction and source of instruction for tourists.

At the February meeting, Dr.P.S.Clarke submitted an interesting paper upon the fish of the Barrier Reef. Unfortunately the Doctor could not be present, and his paper was read by the President (Dr.Flecker) The paper was well studied and Dr.Clarke had sent some lantern slides that added to the interest

of the paper.

The lecture was divided into two sections, the first of which was of much interest to practical fishermen, and was of particular value to one used to fishing in other waters. He described the special phases of the Reef, the difficulties of net fishing and the virtues of line fishing over coral beds. There was much information upon the kinds of hooks and the classes of baits to be used for particular fish. He dealt with almost all the fish found along the reef, paying particular attention to such as the groper, the various cods, bream, ling, snapper and even Shark. The Doctor had studied the habits and physical characteristics of all the fish he referred to with a result that those present who had never been on a fishing trip were interested from the purely "natural" point of views

Members who exhibit natural objects at the monthly meetings of the Society are growing in numbers, but unfortunately the rule that such exhibitors should also supply the Secretary with a note upon the exhibits has not been adhered to Many of these notes would be useful for inclusion in the journal. In regard to this "practical"matter members are asked to cooperate with the Editor by supplying him with matter for publication. The Journal does not desire to be merely one of general notes and news, so much as a record of the Club's research activities.

A sea serpent which was snared by Dr. Clarke has been handed to the Club. An interesting radio-graph of the serpent, which is just four feet long, and twice the thickness of snakes was taken by Mr. A.B. Cummings, X ray technician and member of the club. This picture discloses perfectly all the serpent's internal organs, including a float bladder, which proves beyond doubt that the sea snake is an air breather. Three small fish and a shrimp are easily discernible in its stomach. The serpent and the radiograph, as well as other X ray pictures of a crocodile and a tortoise, will be exhibited at the next meeting of the Club.

Three new members are and three nominations were recorded at the last monthly meeting. This illustrates the steady progress in regard to membership made by the Club. Each meeting since the inaugural one has accepted new names into its membership list. One member now in London, is a member of the South London Entymological Society. Here recent members are Hr. Edmund Illen who was the secretary of the old Cairns Field Naturalists Club referred in our first issue, Hr. W.H.Coleman an ornithologist of Yungaburra, and Hr. W.Hagerdorn, tobacco planter of Koah, who was ten years a rubber and cocoanutplanter in Samoa. He studied at the Halle University and is a member of Corp Agronomia, Halle.

The following is a list of plants declared "Protected" pader the Native Plants Protection Act 1930. The list appeared in the Government Gazette, Feby. 25th, ans was received at the March Meeting of the North Queensland Naturalist Club.

#### Botanical Name

Adjantum Runulatum Asolenium laserpitiifolium

Lygodium spp.

Cotrioglossum pendulum Fteris spp. (all species) Viitaria elongata

Cymbidium Sparkesii

Dendrobium Johannis

Dendrobium Smilliae Dendrobium Toftii Eria Fitzalani

Oberonia spp.

ORCHIDS.

Soldier's Crest Orchid, all species.

Vernacular Name.

Kidney Maiden Hair Fern Johnstone River Maiden

Climbing Maiden Hair Ferns,

Hair Fern,

all species. Ribbon Fern.

Bootlase Fern.

Banana Orchid.

Black Orchid Golden Orchid Bottle Brush Orchid

Phalaenopsis amahilis Phalaenopsis Rosenstromii Pholidota imbricata

MISCELLANEOUS PLANTS.

Dischidia numularia Buxycles amboincusis Lycopodium spp. Myrrae sodia Antonii. Selaginella spp. (All species).

Button Orchid Caftens Lily or Cardwell Lily All Lycopods &Tassel Ferms. Ant Orchid.





## THE 'N ORTH QUEENSLA-ND

## NATURALIST.

The Official Journal and Magazine of the North Queensland Naturalist Club.

Vol.1 No 7 .

VICTOR

April 1933.

### EDITORIAL.

Progress since last issue has been marked in several directions. Although the sought for cooper -ation of the Cairns City Council has not been siccassful in some important matters, it seems to have been from a misunderstanding by Aldermen rather than from antagonism to the Club's suggestions. In other ways the flub has received help and valuable assistance. The museum has been advanced a stage by the donation of tases by timber merchants and cabinet makers, besides 100 large glass jars for the holding of specimens. The Green Island Guide service is being proceeded with also and field excursions are yielding satisfactory results in research work. This Journal, despite its primitive form, is subscribed to by a number of libraries and individual

#### THE MORTH QUEENSLAND NATURALISTS CLUB.

Masting Rooms: Motor Boat Club Rooms, Cairns.

General meetings are held on the second Monday in each month and committee meetings are held on the first Monday, both meetings at 8 p.m.

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Lecture and adjournment - After the ten minute interval, Miss R. Dodd will deliver a lecture.

Date of Meeting - April 10th, 1933.

CLUB OFFICIALS: President, Dr.H.Flecker: Vice-Presidents Capt. W.P.Fish and Miss Hooper; Secretary, J.Wyer: Executive Committee, the fore-going with the addition of M.J.Manski. and W.M.Grant: Treasurer, R.J.Gorton: Editor and Librarian, Victor Kennedy.

#### LIFE HISTORY OF AMELYPODIA AMYTIS.

{ By M. J. Manski.)

My observations with the life history of this butterfly is well worth recording, and although the larvae and pupac and butterfly have been described still there remains sufficient to warrant publishing. The eggs, which are very small, are milky white, somewhat flattened out with ribbed sides and smooth top which gradually tapers to the centre which is black and forms a hollow. They are deposited in the young stems of the food plants (Cassia Brewsterii and C. Alata also various species of wild Hibiscus ) in group (29 in one group) so close together that they appear to touch one another and are closely guarded by the green ant (Occophylla Smaragdina). The young larvae are gregarious feeders and are directed to the young leaves by the ants. I have taken the larvae on. emergence and tried to rear them without ants but they all died within 24 hours. On: taking larvae from the ants one week old they likewise died; at ten days old the larvae pupated next day but the small larvae did not mature. On taking larvae 14 days old they pupate next day and the butterflies emerged 14 days later. Taking larvae 10 days old with a number of ants, I reared them until they pupated and they likewise emerged butterflies. After pupation the ants died off and so possibly the fluid from the glands on back of the larvae is a source of nourishment for the ants. The larvae, on preparing to pupate, curls the side of the leaf over just sufficient to cover it and fastens it with silk.

Just a few days before the butterfly emerges the wing colours can be seen a light purple which gradually turns to deep blue, and the time of emergence is in the morning.

### GEOLOGY OF THE BARRIER REEF.

The Lecture adjournment of the March meeting was occupied by Mr. Victor Mennedy, who detailed the geological structure of the Great Barrier Reef. leading the meeting through the literature that had accumulated upon the subject since Darwin's studies appeared. Darwin as a result of his voyage in the Beagle and his brief study of the Cocos Keeling Atoll, formulated the theory of subsidence by which he sought to explain the shape and growth of atolls. A reef had formed around an island which had ultimately slowly subsided, the ring of coral meanwhile continuing to grow upward. As the land mass had sunk beneath the sea surface the fringing coral had grown above it and accounted for the ring shape and for the lagoon in the middle. The strong support given Darwin by the American J.D.Dana ("Corals and Coral Islands") in 1875 gave the name Darwin-Dana Theory to this suggestion. But Dr. John Murray who accompanied the Challenger expedition in the mid-seventies published a counter theory in 1880. He concluded that there had been no subsidence but in fact the reef had been built upon an emerged bank. The lagoon had then been formed by solution by sea water. The solution theory had been discounted, but there was good evidence for the emergence theory in regard to some atolls; the Challenger expedition also the works of Admiral Wharton and others had established (what Darwin could not know) that such submarine banks did actually exist in the cocanse Darvin of course had admitted that an atoll could be formed where banks existed and even the ancient theories of submerged volcance rings could be true in isolated instances. Professor Wood-Jones in 1906 established at Cocos-Recling that there had been no evidence of subsidence there. This study of atolls was important in a study of Barrier Reefs such as the Barrier Reef of Queensland.

Professor Beete Jukes of Dublin, a member of H.M. S. "Fly" expedition, published the first scientific account of the Great Barrier Reef in 1880. He conte -tended that there had been definite subsidence of a shelf of the mainland - the Continental Shelfand upon this the reef had grown. Alexander Agassiz however cruised along the reef in 1890 and concluded that the shelf, which undoubtedly, existed, had been caused by sea erosion of the mainland. An in eresting theory concerning the shelf was also that of Professor R.A. Daly who suggested that the waters of the circum-equatorial regions had then lowered during the great ice ages by about 30 fathoms by the accumulation of waters, in the form of ice, at the poles. When this ice melted the waters flowed back to the oceans and raised the level of the seas to its former level. Meanwhile however the low level had cut a margin along the . continent which was 30 fathoms deep when the waters returned. Upon that ledge the coral grew. While Wood-Jones was at Cocos Keeling in 1906, Mr. Charles Hedley was publishing his "coral Reefs, of the Barrier" in which he claimed definite evidences of subsidence in the region of the Barrier Reef. Two years ago Dr.C.M. Yonge at Low Island added his support to the subsidence theory which seemed to be a fact in regard to the Barrier Reef. The speaker also referred to the expedition to Funafuti in the Ellice group, the reports of which were published in 1904, and the boring by Charles Hedley on Oyster Cay in Michaelmas Reef in 1926 - expeditions of great geological importance. Having a bank or ledge that comes to within say 40 fathoms of the surface and in waters free of sediment, reef coral would grow. The coral colonies having grown and been killed gave rise to new colonies upon them. To this were added sediment, the remains of dead

sea animals and regetations that ultimately lifted the great mass to just below low tide level. Thus. in the case of the Great Barrier Reef, a broad platform of coral bressia cemented by the lime and sand and fragments was formed above the shelf. On the seaward edge the mighty rollers of the Pacific harled themselves for centuries, at times tearing up masses of coral rock and boulders from the slope and hurtling them upon the edge of the reef. Some would be too big to be trundled further and would remain as a raised edge of the reer comented there by lime and coral growths and lithothamnionae. Smaller fragments would be rushed across the reef flat towards the mainland. Crevice's would be filled with sand and lime that ultimately would settle it harder than any cement known to man. Pieces of large rock would wear this flat smooth and prevent the lodgment of more fragments or growth of new coral. The smaller pieces of rock and sand would be swept further across this flat until some pieces lodged. Around these would gather smaller fragments and sand and as the centuries passed this would be added to until the mass was raised slightly above sea level as a sand cay. Birds would come to rest and nest upon and then fertilise it with low grasses as in the case of Oyster Cay and Upola Bank. The grass would act as a binder, the birds would keep fertilising it, water resisting seeds such as coconuts would be thrown up, more sand would come and ultimately the island grew larger become more covered with vegetation and stand out as a typical coral island, such as Green Island. A few hardy corals would grow in the shelter of the rocks and pools of the seaward edge, none on the flat and a profusion in the immediate surroundings of the island. Further towards the mainland the reef diminished and ceased owing to the sediment borne down by the mainland rivers thus leaving a deep water channel along the coast for shipping.

#### EXCURSIONS.

Two particular excursions have been held since last issue, one to the proposed site of the Council botanical gardens and along the Edgehill road. This centre is a happy hunting ground for Naturalists with a bent for flora and insect study. Dr.Flecker and Messrs. M.J. Manski and L. Wright were particularly valuable as guides to the party which was organised by the Excursion Secretary, Mr. W.M. Grant. second outing was held on Sunday March 26th, to Green Island. It was made primarily with the purpose of instructing and examining guides although a number of others joined the party including several visitors from the South. Only one prospective guide, however, submitted himself for examination by Dr. Flecker and Mr. V. Kennedy of the Board of Examiners. The tide was low for about three hours before the boat left on return, and a good study of the reef was had. Several specimens of extended Fungia Danae (Mushroom coral) were seen and a large number of holothurians, soft . coral, Porites, Acropora, and Pavonia corals, sca urchins, anemones with crabs and coral fish, encrusting lithothamnion, star fish, a sea hare, and a host of other forms of marine life that can only be seen by wading out at low tide. The visitors expressed their appreciation of the help that the Naturalists Club through its representatives had been to them. Unfortunately there was insufficient time to study the island itself for which another trip is proposed. It is of interest to note that the Club's "Comprehensive Guide Book to Green Island" is nearing completion. It is in the expert hands of Dr. Flecker.

#### GENERAL NOTES.

#### THE STARGAZER ----ICHTHYSCOPUS.

meeting of the Club as an unknown fish, has been identified as Ichthyscopus lecker. It was caught on a fishing line by Mr. Rasmussen about two miles from the mouth of the Barron River, and about half a mile from the shore. Upon the lines being hauled in, the fish fell into the bottom of the boat but immediately started to climb up the side where it remained. Its breathing could be noted by the peculiar respiratory organs (quite apart from its gills) on each side of the dorsal aspect behind the head.

WEEPING GUM ------MAHOGANY.

A specimen of this tree, Eucalyptus, botryoides, raised from seed about nine months a, in Cairns, which has been planted at the South West corner of the Old Age Pensioners Reserve, Cairns, is already ever three feet high and is probably one of the first planted in this district. It is a native of Gippsland, Victoria and apparently thrives very well here.





## MUSEUT HE NORTH QUEENSLAND

### NATURALIST

The Official Journal and Magazine of the North Queensland Naturalist Club.

Vol. 1. No 8.

Hay 1933

#### EDITORIAL.

The work goes on Although in some respects the Club received checks during the month, in other respects steady progress has been noted. It was particularly manifest in the field work. Although it has been difficult to arrange field excursions with good attendances, the work of individual members has been eager. This was revealed in a fine number of exhibits at the April meeting. Members are becoming interested in the educational work of the Club also Apart from that the President, especially, is frequently approached by telephone, by letter and personally for advice and information, The Club is repeatedly being asked to use its influence on behalf of the natural flora of the district. The result? It is not obvious yet, but it will undoubtedly take the form of greater public interest in the things that Nature has given us.

#### THE NORTH QUEENSLAND NATURALISTS CLUB.

Meeting Rooms: Motor Boat Club Rooms, Cairns.

General Meetings are held on the second Monday in each month and committee meetings are held on the first Monday, both meetings at 8 p.m.

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Lecture and adjournment - After the ten minute interval, Mr. Pedder will deliver a lecture on Taxidermy.

Date of Meeting - May 8th, 1933

CLUB OFFICIALS: President, Dr. H. Flecker: Vice-Presidents, Capt. W. P. Fish and Miss Hooper: Secretary, J. Wyer: Executive Committee, the fore-going with the addition of M. J. Manski and W. M. Grant: Treasurer, R. J. Gorton: Editor and Librarian, Victor Kennedy.

## MIGRATING INSECTS OF QUEENSLAND. ( By Miss.K.M.Dodd.)

Though most people know that certain birds make seasonal migrations, few are aware that some insects, too, feel the call that causes them to travel -often for incredible distances to the goal that nature has ordained.

It is with several of these insects I propose to deal.

Comparing the migration of birds and insects there are several differences. Most migrating birds travel far greater distances than do the insects, which is only reasonable when one considers the frail structure of the latter creature.

Birds, when they migrate, travel the same route year by year, the young generation keeping with the older birds until they, too, know the way and can fly unerringly to their destination.

In insect migration there are no leaders to show the way, because the migrating broad dies soon after its arrival at the feeding ground.

The insects I will speak about are two Queensland Butterflies and a Moth. These three are most interesting travellers, each being seen in Cairns areas for a few days only as they pass on their way.

I shall deal with the "Migrating White"butterfly, (Anaphaeis java tentonia) first. It breeds in South Queensland in thousands, feeds for a short time and then begins its journey north. Only a small percentage of these butterflies reach as far as North Queensland and these specimens begin to appear in the Cairns district generally late in Occober. In a few days the number increases amazingly, Further south people wonder at their swift flight. In places so

#### Page 4.

numerous are they, that they memind "old country" folk of a snowstorm. Many play about in gardens for a time and then on they go northwards in the quest for their particular food plant.

Having been successful in this, the female butterflies lay their eggs and shortly after, their work accomplished, they die.

The eggs hatch and soon the caterpillars are feeding voraciously, changing their skins as the old ones get too small. On reaching full size, the caterpillars change into the dormant chrysalis stage, and when the butterfly emerges it flies seuth to the regions from whense its parents came, though strangely enough, the Northern bound flight is composed of many more insec than the returning body.

The other butterfly, (Bedamia exclamationis) is a dun coloured species of the "Skipper" family, about two inches across the wings. It is so plain that it remains unnoticed by most folk though it passes our district in millions and millions. Its flight is particularly rapid and has been estimated at between twenty and thirty miles per hour.

This butterfly also begins its life in Southern or Central Queensland where its caterpillars are seen often in tens of millions upon the trees on which they feed and the chrysalids can be found in great numbers. Then, when the butterflies emerge, the flight north begins. The first specimens appear in this locality towards the end of February and then the numbers increase. At our garden in Kuranda we have seen hundreds in a few moments. Here are some interesting particulars of a flight of a few years ago of which my father took particular notice. In our side street coming from the south east and flying along a ninety foot stret we did our best to count them. In the first five minutes at 9 a.m. we counted 500; at 11 a.m.

#### Page 5.

they were in such startling numbers that we again essayed a count, and estimated 2,000 in five minutes. As we were hardly likely to sight and count all the skippers we may safely assume that their numbers were in excess of our count.

They are not always in such numbers. However in our garden of 100 yards width thousands passed daily for weeks. The flight extends from the Coast inland for some distance, numbers of the butterfly being noticed at Tolga and Ravenshoe. Thus we can but dimly grasp the wonders of this vast migration. In seven or eight months time we see a return flight, members of another generation, but never in extraordinary numbers.

Now for our big friendly day flying moth (Nyctalemon Orontis) which most people think is a butterfly, and which often flies inquiringly into our homes, or inspect the lines on washing day, and seems to be irresistably drawn by the small of petrol. This insect does not make such a long trip as either of the butterflies referred to, but generally travels from the coast inland for a distance of two or three hundred miles, in search of food. This moth is a splendid flier and can be seen as the tiniest speck hundreds of feet in the air, flying along calmly out of reach of the surface winds.

You may wonder what is the reason behind these migrations. Probably the chill of winter is no more pleasing to certain insects than it is to the birds, and again the search of food is an important factor. If the insects stayed in the same regions the whole year round, the good plants would be entirely consumed, so nature wisely sends the insects forth, giving the trees time to recuperate and be ready to support the insects when they return to their nature soil.

#### EXHIBITS.

The following natural specimens were exhibited at the April meeting of the Club:

Nest of wasp made of segments of leaves by wasp. Exhibited by Capt. W.P. Fish.

Hawk Moth. 13 inches long with Proboscis 23 inches long, coiled like a watch spring beneath head. Collected by Dr. P.S. Clarke.

Beetle (Cetonidae) . Collected by Mr. Simmonds.

Nest and eggs of Grass Warbler (Cisticola exilis) collected about 3 miles S.W. of Yungaburra. Nest a very frail structure, leaves sown together and lined with cobwebs and thistle down and placed in small bush about 2 feet from ground. 4 eggs in nest. Presented N.O. Museum by Mr. W.H.Coleman.

Nest of Sun Bird. Leaf nest and grub of wasp. Also eggs and hatched insects (bugs). Exhibited by M.J. McAuliffe.

Funnel-webbed spide: (Most deadly species of Australia Spider) Found inside a termites! nest after breaking i up. Appears to have 5 pairs of large legs, but front pair are palpi. Exhibited by Mr. E. Locke.

Hong-comb nest of Wasp, also Firefly (Beetle). The light comes from under surface of hinder part of abdomen. Exhibited by Dr. Flecker.

3 eggs of common skink (lizard) (Amphibelurus) also Case Moth and Wire Worm - Exhibited by Dr. Flecker.

Dovils Pineapple (Tapeinocheilos pungens var Queenslandiae order Scitamineae) Exhibited by M.J. Manski A large centipede was kept in a cardbeard box by a club member, but it found an exit by bering a hole through the lid. In the process it tore away large strips of the layers of eard, or paper, forming the cardboard. Then it bered the thinned-down material loaving a mass of fine shredded paper.

### SNAKE SUTIDITIES.

Porhaps most people who have never seen a snake awam in water believe that they travel on the surface. At Lake Barrine, the handsome rock python (Python amethy atinus) was seen to dive neatly into the depth of the water and swim away neatly by its own undulatory mevement ontirely beneath the surface.

WEIBERSHIP.

At the April meeting of the Club, Mrs. Diek of Kuranda was nominated for membership. Dr.P.B. English of Cairns and Mr. W.H. Soloman of Yungaburra were elected:

#### A GREAT WORK.

with the next issue of this journal, it is proposed to commonce the publication of a sensus of all the Natural fauna and flora of this district. The task is ambitious but is one that can be accomplished by the active participation of all members. Also it is a work that has awaited for nearly 60 years the advent of a Naturalists Club, without which it could not be effected.

#### IDENTIFIED SPECIMENS.

The following communication was received from the Director of Queensland Museum (Mr.H.A.Longman)
The Club had written to the Director enclosing some shell and other marine specimens for identification:-

The photographs sent by you for identification are being returned with generic and specific names, as available, written on back. Brittle-stars cannot be identified from photographs. Until these are adequately illustrated in a comprehensive monograph the classification is extremely difficult, except to a few specialists.

The shells forwarded are identified as follows:

59 - Molania denisonensis Brot. 71.-Acmaca costata
Sowerby. 55 - Helix forsteriana Pfr. These names have
not been revised. It should be noted that some of the
old genera, such as Helix, are now split up into several
distinct genera, according to some authorities.

specimens of the marsupial musk rat-kangaroo,
Hypsiprymnodon moschatus, could be obtained and preserved whole in spirits and sent to the Queensland
Museum. This is one of the most interesting of our
smaller marsuoials from the anatomical standpoint. It
is found in your district, and I understand that it is
known as the "Black Bandicoot."







## THE NORTH QUEENSLAND NATURALIST.

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Vol.1 No 9

June 1933.

#### TAXIDERMY.

Mr. Pedder of Calras. Mr. Pedder has had a great many years experience in the old country in taxidermy and gave an instructive lecture on the subject to members of the Club. His illustration and demonstration of stuffing birds and animals was of peculiar interest to the Club at the time because of the efforts being made to establish a Museum in Cairas. Several members took particular note of many details and a vote of thanks was heartily accorded to the lecturer.

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Lecture and Adjournment -- After the ten minute interval, Dr. James Park Thomson will deliver a lecture on "The Barrier Reef". Date of Meeting, June 9th.

CLUB OFFICIALS: President, Dr.H.Flecker; Vice-Presidents, Capt. W.P.Fish and Miss Hooper: Secretary, J. Wyer; Executive Committee, the fore-going with the additiona of M.J.Manski and W.H.Grant; Treaurer, R.J.Gorton; Editor and Librarian, Victor Kennedy.

#### THE GUIDE SERVICE.

The Club is not being assisted by thus: institutions that have much to gain by an effective service of trained guides on Green Island. Although the tourist season is well advanced, visitors are taken to the reef without any advice or preparation. When they arrive at high tide they may see nothing; even if the tide is low they still may not go on to the reef because of their good shoes and clothes. If they had had a little advice before leaving Cairns they would at least take a pair of old shoes. The Club has endeavoured to force this position upon the notice of shipping companies and local authorities without success. The Orungal took its complement of passengers to the Island and anchored out; A local launch then charged the visitors 4/6 return to take them from the vessel and land them on the jetty. When landed they had to remain upon the island because they were not prepared to go upon the reef, and, besides, two Olub Guides who were present could not ask them to pay an extra 2/- for guidance. The Club had sought to place those two guides aboard the Orungal so that the passengers may have learned en route what to expect and how to prepare for a visit to the reef. The shipping company, however, chose to regard the guides as "local passengers", and the tourists were deprived of their services and trained advice.

#### WILD NATURE SHOW.

The Wild Nature Show proposed by the Club will be held in the Oddfellows Hall, Cairna, on August 18th and 19th, commencing in the afternoon of Friday the 18th. Exhibits will include any Natural objects indigenous to Australia, with special pride of place to North Queensland fauna, flora and minerals.

#### EXHIBITS.

The following specimens were exhibited by Dr. Flecker at the May meeting of the Club:-

Aleurites moluccana (Candlewood nut)
With nest of insects surrounding branches
etc. Nest does not appear to harm young
plant.

Land Shell Helix forteriana (Pfeiffer)

Seeds of "Devil's Claw" or "Tiger's Claw"

(Martynia diandra) Grown in cultivation

from plant taken at Mt. Mulligan. Is an
imported weed and has been declared noxious.

Box from which large centipede escaped (See reference in last issue of the Journal)

Pinna. Collected at Holloway's Beach

Stick Insect (Phasmidae)

Podocarpus ladei. Collected by Harvard scientiests at Mt.Spurgeon, 4,400 feet above sea level, on Mossman River.

Freshwater Shell (Melania denisoniensis)
From Collin's Gully Creek.

#### MEMBERSHIP

At the May meeting Mrs. Dick of "Fairyland" Kuranda was elected to Membership and the following proposals were received and will be ballotted for at the June meeting:-

Miss K. Dodd; Messrs Davies, Shridde, T. Walshe; G. Kiernan and C. Bowen.

(Including Pastoral District of Cook, Burke and North Kennedy, and that portion of the Mitchell North of the 22nd parallel of South Latitude. )

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Hibbertia
Kingdom Plantae.
Division Phanerogamae (Linn.)
                                    millari (Bailey)
Class Dicotyledoneae (Ray)
                                     Musgrave (T.B.Millar)
Subclass Choripetaleae hypog-
                                    synandra (F.v.M)
    ynae (F.v.M)
                                     Rockingham Bay (Dalaachy)
Family Ranunculaceae (Juss.)
                                    velutina (R.Br.)
                                     Walsh's Pyramid, Mulgrave
Clematis (Linn)
                                     River; Mt-Harold off
   glycinoides D.C. Erect Cle-
   matis. (Flowers in August)
                                     Tringilburra Creek.
   North of Rockingham Bay,
                                    lepidota (R.Br.)
                                     Northcote (Burton)
   Southward.
Family Dilleniaceae (Salisb.)
                                    melhanoides (F.v.M.)
                                     Rockingham Bay
Tetracera (Linh.)
                                     oenotheroides (F.v.M)
   daemeliana (F.v.M)
                                      Gilbert River (R. Daintree
    Cape York (Daemel)
                                    bennettii (Bailey)
   nordtiana (F.v.M)
    Rockingham Bay (J. Dallachy)
                                      Irvinebank.
    cowleyana (Bailey) Teeweeree Family Nymphaeaceae.
     Cairns(Cowley); Herbert
                                  Nymphaea (Linn.)
                                     lotus (Linn.)
    River (Eaton)
                                       Var-australis(Baile);
   withiana (F.v.M)
     Daintree River (Fitzalan);
                                      White Water-Lily.
     Rockingham Bay(Dallachy)
                                      Still waters off Barron
                                      River.
 Wormea (Rottb.)
                                     tetragona (Georgi)
    alata (R. Br.)
                                      Small Bluish Water-Lily
     Pine Creek
                                 Family Piperaceae (Rich.)
 Hibbertia (Andr.)
                                   Piper (Linn.)Pepper
    banksii (Benth.)
                                      novae-hollandiae (Miq)
     Endeavour River (Benth.)
                                      Australian Pepper-vine.
    dealbata (Benth.)
                                      Rockingham Bay (Dallach
     Coast Sands at Somerset
    candicans (Benth.)
                                     banksii (Mig.)
                                      Endeavour River (Banks
     Albany Island (F.v.M);
                                       and Solander)
     Cape York (M'Gillivray)
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	· /
Page 6.	Melodorum (Dun)
Piper . / Tana	uhrii (F-v.M)
mestoni (Bail.) Long	Scrubs of Rockingham .
Pepper.	
Harvey's Ck; Rassell Rv.	Bay (Dallachy)
rothiana (Bail.) Chibbi	maccreai
Atherton(J.F.Bailey)	Rockingham Bay(Dallachy)
Peperomia (Ruiz & Pav.)	Saccopetalum (Benth.)
Leptostachya (Hook & Arn.)	brahei (F.v.M.)
Rockingham Bay (Dailachy)	Pt.Denison
enervis C.DC & F.v.M	Family Monimiaceae (Juss.)
· Bartle Frere (Johnson	Palmeria (F.v.M.)
and Meston)	scandens (F.v.M.)
amily Magnoliaceae (St.Hil.)	Rockingham Bay (Dallady)
	Mollinedia (Ruiz & Pav.)
Drimys (Forst.)	angustifolia (Bail.)
membranea (F.v.M)	
Hills about Mulgrave Rv.	3,000 to 4,000 ft.
semicarpoides (F.v.M)	wardellii (F.v.M.)
Russell Ck. (Sayer); Rock	Rockingham Bay(Dallachy)
-inghom Bay(Dallachy)	macreoraia (Bail.)
Galbulimima (Bail;)	Bellenden Ker range up
haccata (Bail.)	
Boar Pocket & Evelyn,	to summit of S. Penk.
Herberton District: (J	loggeorys (Benth.)
F.Bailey)	Rockingham Bay
Pamily Anonaceae (Juss.)	acumineta (F.v.M.)
Uvaria (Linn:)	Rockingham Bay (Dallachy)
membranacea (Benth.)	subternata (Bailey)
Somerset (M'Gillivray)	Freshwater Ck. (E.Cowley);
góezeana (F.v.M)	Tully River (Roth.)
Mountains around Rock	Kibara (Endl.)
-ingham Bay(Dallachy)	macrophylla (Benth.)
Polyalthia (Blume)	Endeavour River.
nitidissima (Benth.) Wo-a	laxiflora (Benth.)
Thursday Island; Batavia	Rockingham Bay
River.	pubescens (Benth.)
Mitrephora (Blume)	Rockingham Bay (Dartachy)
	Daphnandra (Benth.)
froggattii (F.v.M)	aromatica (Bail ) Cheed-
Mossman River (Sayer &	ingnan-
inoggation)	Tohnstone River.
Hoplostichanthus (F.v.M)	Family Lauracese (Verit; )
ichasoni (F.v.M)	Cryptocarya (R. Br.)
L'i Bartle Emere (Johnson	OTAB COCHT ALC LITE COLL)

Page 7. Cryptocarya Endiandra. murrayi (F.v.M.) Cape Grafton (A. Barron River; Rockingham Cunningham) Bay (Dallachy) Rockingham Bay mackinnoniana (F. v.M.) . (Dallachy) Koonjoongaroo hypotephra (F.v.M.) Cape York (Hill) Rockingham Rockingham Bay Bay (Dallachy) (Dallachy) obovata (R.Br.) Sycamore discolor (Benth.) Rockingham Bay (Dallachy) Albany Island & Cape glaucescens (R.Br.) York(W.Hill); Rock-Rockingham Bay (Dallachy) ingham Bay(Dallachy) var.coriace (Benth.) cowleyana (Bail.) Rockingham Bay (Dallachy) Scrubs near Barron triplinervis (R.Br.) Rv. (E. Cowley) Rockingham Bay (Dallachy) dichrophylla(F.v.M.) Pt. Denison (D Fitzalan) Russell River(S. Edgecombe Bay (Dallachy) Johnson) cinnamomifolia (Benth.) exostemonea (F.v.M Rockingham Bay (Dallachy) Daintree River oblata (Bail.) (Pentzke) Daintree River (E.Cowley) sankeyana (Bail.)Goolgraveolens Bail.)Gir-irjal away Tringilburra Creek; Ather-Scrubs about Barron ton (J.F. Bailey); Johnstone . River (E.Cowley) River (Bancroft); Tully Rv. insignis (Bail.) Boom-(J.F. Bailey) ban palmerstonii (Bail.) Black Barron River (J.F. : Walnut. Bailey); Cairns Dist-Barron River rict to Bellenden Russell River. Ker Range (Bailey); bancroftii (Bail.)Red Walnut Atherton (Roth) Johnstone River; Tully River tooram (Bail.) Tooram Cardwell. Middle Tully River Beilschmiedia (Nees) (J-F.Bailey) obtusifolia (Benth.) Cinnamonum (Burm.) Rockingham Bay (Dallachy) propinguum (Bail.) lachnostemonea (F.v.M.) Summit of Bellenden Russell River (Sayer) Ker Endiandra (R.Br.) Litsea (Lam.) glauca (R.Br) chinensis (Lam.) Endeavour River (Banks &Sol) wislands of Gulf of

Page 8. Litsea. Hernandia (Linn.) Carpentaria (R.Br. peltata (Meissn.) Henne); Pt. Denison (Fitzalan (Dallachy) zeylanica Lizard Island (Banks & Family Menispermaceae Solander); Rockingham Timespora (Miers) Bay (Dallachy) Between Rockingham &Cleveland Bays (V.Hill); Pt.Deni-Yorkson (Fitzalan) dealbata (Nees)Marragid berneyi (Bail.) Haghenden -die. Limacia (Lour.). Barron River (J.F. Bailey) selwynii (F.v.M.) bindoniana(F-v-班-) Summit of McAlister Adeliopsis (Benth.) Hill, Rockingham Bay (Dallachy) ferruginea (Benth-&Hook) Pycharrhena (Miers) Endeavour River & Cape Grafton (Banks &Solandor); Rockingham Bay Trinity Bay-(Dallachy); between Pachygone (Miers) Rockingham &Cleveland Bays (W.Hill) var .lanceolata (Meissn.) ford) Family Island, Rocking Cleome (Linn.) -ham Bay (Dallachy) tetrandra (Banks) reticulata (B.&.H.) Bally Gum-Capparis (Linn.) Rockingham Bay (Dallumbellata (R-Br.) achy) lassytha (Osbeck)Laurel Dodders. glabella (R.Br.) Tangled Dodder-laurel. quinifolia, DC-Islands of Gulf of Carpentaria (R.Br.) filiformis (Linn.)

ick's Group (F.v.M.)

P.

Frankland Islands (H'Gillivray): Dunk Island (Dallachy) smilacina (Benth.) Thursday Island&Core Kamerunga (Cowley) decumbens (Benth.) Cape York Peninsulaaustraliana (F-v-M-) Endeavour River & near latifolia (Bailey) Mourilyan Harbour (Mug-Family Capparideae (Endl.) Gulf of Carpentaria (R.B. Coast Scrubs from Cape York to Pt. Denison. lasiantha (R.Br.)Nipang Flinders River: Cloncurry Hamilton Island, Torres St., Ranges f rom Cape York to Cairns. Albany Island: How-

(To be continued)





#### NORTH QUEENSLAND

#### NATURALIST.

The efficial Journal and Magazine of the Worth Queensland
Naturalist Club.

olal Bo 10

THE

July 1933.

HABITS OF HEROULES MOTH, (Coscenoscera Heroules, Misk., )
By M.J. Manski.

This giant moth of Family SATURNILDAR -Emperor Loths - having a wing span of nine inches in the make to eleven inches in the female, is very plentiful in this district. They are rarely seen being night fliers, although they have been seen on the wing in day-time when probably disturbed from slumber. They adhere to the trunk of a tree during the day with wings outstretched, and select bark in colour, nearest the colour of their wings and so are difficult to see. The eggs are laid on old coccons and probably stems or leaves and in shape are like a bean seed but much smaller and vary in colour from pure white to red. The young caterpillar, on emergence is pure white and spiny.

Page 2.

and it eats nearly all the egg shell before it leaves the cocoon or stem to search for its food. After several sheddings of skin (Chitin) it gradually becomes darker and when full-grown is a pleasing green colour, the caterpillar being then about five inches long by about one inch think.

When about to pupate it selects a large leaf near the outside of the tree and spins silk around the stem and on to the petiole of the leaf totally covering the peticle, and it gradually draws the leaf around itself with silk when it spins its cocoon inside. The leaf dries but does not fall as it is attached to the branch of the tree. I have discovered two different food plants and have obtained cocoons from twenty feet high to within five feet from the ground. I have also discovered them on other plants not being food plants, the caterpillar apparently leaving the food plant to pupate.

The pupe may take as long as four hundred days before the moth cuts its way out of its cocoon and after it inflates its wings and dries, the large moth is ready for its mission in life. The food plants do not grow in thick scrubs but may be seen on the outside of scrubs particularly along creeks; one plant rarely attains twenty feet and the other rarely attains thirty feet.

#### MEMBERSHIP

The following were elected to membership at the June meeting -

Miss K.Dodd; Messrs Davies, Schridde, Walshe, Kiernan and Bowen.

Messrs Yardley and Harraway were nominated and will be ballotted for at the July meeting.

The lecturer at the July meeting will be Mr.Bates on "Composition of Soils."

The lecturer at the June meeting was to be James Park Thomson, the Hon, Secretary and founder of the Royal Geographical Society, (Queensland () who was visiting Cairns. The lecture was made a civic function by the City Council and His Worship the Mayor (Ald. W .A.Collins) presided. It was held on Friday June 9th, earlier than the scheduled meeting night of the Club (June 13th)

Dr. Thompson's lecture was well attended, as it should have been because of its intense value to the people of the North, dealing as it did mainly with the islands of Torres Strait and the Great Barrier . Reef. It was well illustrated by excellent lantern slides. Dr. Thompson went into the geological structure of the reef and detailed the work of the several expeditions that had been sent to study the reef. He also referred to the work of his own Society in popularising the Great Barrier Reef as a tourist resort before that tourist traffic had reached anything like its present proportions. From the geology he went on to the biology of the recf, and, assisted by his beautiful slides, he gave a fine conception of the extreme beauty and variety of life in the coral. Some slides showed the corals extended like flowers and it could be easily understood why the name "coral gardens" had so often been applied to the lovely underwater structures. The lecturer said that if those pictures were not taken from actual life, he could understand an opinion that they were exaggerated. But they were not as members of the Cairns Naturalists Club had been able to indicate to many visitors of recent months. He complimented Cairns upon possessing such a Club and the Club itself upon the work it was doing.

Dr.H.Flecker, President of the North Queensland Naturalists Club, moved a vote of thanks to the lecturer and drew attention to the Club's efforts to establish a competent guide system upon the Reef at Green Island. Unfortunately they were not meeting with the support that he thought they were entitled to, although already their efforts had been appreciated by visitors. Mr.W.C. Griffin seconded the vote of thanks and said that the Cairns people should be proud to have such useful and virile societies as the Naturalists Club and the Cairns Tableland Publicity Association.

#### ADDENDA AND CORRIGENDA.

Vol.1, No. 9, P.5.

After Clematis (Linn) add Virgin's Bower.
For Wormea read Wormia
After (Hibbertia) bennettii (Pailow) add

After (Hibbertia) bennettii (Bailey) add Arsenic Plant.

P.6

For (Drimys) semicarpoides read semecarpoides.

After (Mollinedia) subternata (Bailey) add Wonda.

After (Daphnandra) aromatica (Bail.) Cheedingnan, add (Locality) Barron River P.7

For sycamore(Crypocarya)obovata, read LongTom For var.coriace(C.glaucescens)read coriacea. Before C.triplinervis insert (C.glaucescens)vanitida, Cape River.

For C.bancroftii read bancrofti.

P.8

For Tinespora read Tinospora
After T.berneyi (Bail.) add Yam Vine of Hughend
For (Pachygone) latifolia, read longifolia.
For (Capparis) quinifolia read quiniflora
For C. palmerstonii read palmerstoni:
Barron Rv. (C. palmerstoni (add Atherton.)

Capparis Pittosporum nummularia (D.C.)Longullah rubiginosum (A.Cunn.) Cloncurry Common on ranges about uberiflora (F.v.M.) Bellenden Ker. Bursaria (Cav.) Cairns (Nugent) ornans, (F.v.M.) Manni tenifolia (Bailey) Batavia River; Pt. Denison Barron Rv. (E. Cowley); Herb canescens (Banks) Native erton (J.F.Bailey) Pomegranate. Family Droseraceae (Salisb.) Lynd & Burdekin Rivers. Drosera (Linn.) Sundew. lucida (R.Br.) Thoogeer. adelae (F.v.M.) Hope Islets; Cape Grafton Rockingham Bay(J.Dallachy Pt.Denison; Burdekin Rv; indica (Linn.) Cloncurry (Palmer) Islands of G. of Carpentar mitchelli (Lindl.) Darling (R.Brown); Lizard Is; Endea Downs Pomegranate. vour River. Cloncurry. burmanni (vahl.) amily Bixineae G. of Carpentaria (F.v.M. Cochlospermum (Kunth.) Lizard Is; Endeavour River gillivraei (Benth.) Pukuru (Banks and Solander) Thursday & other Isl.off spathulata (Labill)Spoon-Coast; Middle Palmer & leaf Sundew. Nassau Rivers; Atherton; From Rockingham Bay Pt.Denison; Burdekin Riv. Southward gregorii (F.v.M.) petiolaris (R. Br.) Gilbert River Is. of G. of Carpentaria; amily Pittosporese (R.Br.) Gilbert & Norman Rivers; Pittosporum (Banks) Endeavour River, (Banks setigerum (Bailey) and Solander) (R.Br.); Walsh River (Barclay-Millar) River. melanospermum(F.v.M.) banksii. Var.(?) lateralis Endeavour Riv. (Banks &Sol. Whitsunday Is. (Henne) Byblis (Salisb.) venulosum (F.v.M.) liniflora (Salisb.) Coastal ranges as Rock-Is.of G.of Carpentaria. (R. ingham Bay, etc. Br.) Walsh Rv. (Barclay-Mill wingii (F.v.M.) Rockingham Bay(W.Armit) Bellenden Ker and other Family Elatineae (Cambes) Bergia (Linn.) high ranges ammannioides(Roth.)Waterfire Thursday Island.

Page 6.	Bridge Bridge Commence
Family Guttiferae	praecelsum (F.v.M.)
Garcinia (Linn.)	
mestoni (Bail.) Meston's	Ranges about Rocki
Mangosteen	Family Wollingers of Wart
Bellenden Ker Range at	Family Meliaceae (Vent.)
altitude of 2000 feet.	Melia (Linn.)
warrenii (F.v.M.)	composita (Willd.)Wh
n'ann' (Con Day (C. Talana	Cedar.
n'ear Coen Rv. (S. Johnson	Herberton(Willd.) C.
cherryi (Bail.)	Is.; MulgraweRv.; But
yuredO.F.C. nead.	kin Ry. (F.v.M.)
Kayea (Wall)	Dysoxylon (Beht)
larnachiana (F.v.M.)	latifolium (Bonth.)
Mossman River	:Is.off Rockingham
Calophyllum (Linn.)	klanderi (F.v.M.)
inophyllum (Linn.) Alex-	Rockingham Eay(J.D)
andrian Laurel.	pettigrewianum (Bail,
Rockingham Bay	Cairns Satin-woo
costatum(Bailey) Evelyn	Barron River (E. Cow
l'eak	Sampa of book of a
Evelyn (J.F.Bailey)	Scrubs at base of a
australianum (F.v.M.)	enden Ker Range.
Rockingham Bay (Dallachy)	nornstii (F.v.M.)
Family Ternstroemiaceac	Scrubs about Rocking
Saurauja (Willd.)	Bay (J.Dallachy)
	schiffneri (F.v.M.)
andreana (Oliver),	Harvey's Creek; Nt. F
Freshwater Ork, near	enden Ker Ranges (Ka
Cairns & creeks about	Russell Rv. Scrubs
Bellenden Ker.	oppositifolium (F.v.
Family Polygaleae (Juss.)	Endeavour Rv. (Armi
Polygala, (Linn.)	Rockingham Bay (Dal)
Leptalea (De Cand.)	cerebriforme (Bailey)
Gilbert River; Endeav-	Brainfruit
our River, Rockingham	FreshwaterCk.(L.J.J.
Bay	Aglaia (Lour.)
rhinanthoides (Soland.)	el agamoidos (Pontil
Endeavour Rv. (R. Brown)	elaeagnoidea (Benth.)
arvensis (Willd.) (Aust-	Is. of Gulf of Carp
ralian milkwort)	Rockingham Bay(F.v.
Endeavour Rv. south	Synoum (A.Juss.)
Ward	muelleri (O.DO.)
stenoclada(Benth.)	Rockingham Bay(F,v)
Endearcar Pierra (D. 111)	Hearnia (F.v.M.)
Endeavour River(Britten)	sapindina(F.r.M.)Boody
	Barran Ry: Herbertor:

Page 7. Family Polygaleae(Continued) Boronia (Sm.) Bredemeyera (Comesperma Labill artemisiaefolia (F.v.M.) secundum (Banks) Is. of G. of Carpentaria Endeavour River. (R.Br.) Family Meliaceae (Vent.) alulata (Soland.) Bala-Owenia (F.v.M.) bal-balgal. acidula (F.v.M.) Emu apple Endeavour Rv. (Banks &Sol Cloncurry. bowmani vernicosa (F.v.M.) Gilbert Rv. (R. Daintree) Musgrave, Cape York Pen. Cape River. Eriostemon (Sm.) (G.Jacobsen) reticulata (F.v.M.) banksii (A. Cunn.) Is. of G.of Carpentaria Sandy shores of Endeavour Riv. (Banks&Sol.) Caprapa (Aubl.) moluccensis (Lam.) Cannon --Philotheca (Rudge) calida (F.v.M.) ball tree. Gilbert River (F.v.M.) Cardwell. Gedrela (Linn.) Melicope (Forst.) fareana (F.v.M.) toona (Roxb.) Barron Rv; Rockingham B. War.australis(C.MC.) chooreechillum (Bailey) Red Cedar. Summit of Bartle Frere Atherton broadbentiana (Bailey) Flindersia (R.Br.) Kangabberoo schottiana(F.v.M.)BunjiBunji Palm Camp (4,000ft.) Bellenden Ker. Herberton. australasica (F.v.M.) Ngobi chatawaiana(Bail.) Red Beech Herberton to Cardwell(J. Tully River. Evodia (Forst.) F.Bailey) Tully Rv. xanthoxyloides (F.v.M.) ifflaiana(F.v.M.)Cairns Rockingham Bay(Dallachy) Hickory. bonwickii (F.v.M.) Scrubs of Barron River; Rockingham Bay(J.Dall.) Edge Hill; Green Island. Brombya (F.v.M.) mazlini (Bail.) platynema (F.v.M.) Evelyn, near Herberton (J. Ranges about Rocking-F.Bailey) ham Bay (J.Dallachy) pimenteliana (F.v.M.) Rockingham Bay(J.Dallachy) Zanthoxylum (Linn.) veneficum(Bailey)Poison bourjotiana (F.v.M.) Rockingham Bay(J.Dallachy) -tree. Family Rutaceae (Juss.) BarronRv. (E.Cowley); Johnstone Rv. (Bancroft) Zieria (Sm.) parviflorum (Benth.) pilosa (Rudge)

Is. of G. of Carpentaria.

Herberton (Tenison-Woods)

Page 8.	
Geijera (Schott)	Glausena (Burm.)
salidifolia (Schott)	brevistyla (Oliv.)
Pt.Denison(Fitzalan)	Hope Is. (M'Cillivray)
parviflora (Lindl.)Wilga	Atalantia (Corr.)
Burdekin Rv. (F.v. H.)	glauca (Hock) Maruwa
Acronychia (Forst.)	Kunquat,
baueri (Schott)	(L.Choncurry; Burdskin
Richmond Rv. (R. Brown)	Rv. (F.v.M.) Pt. Donison
imperforata (N.v.M.)Fraz-	(Fitzalan)
er Island Applio.	(?)rccurva (Benthe)
Harborton(J.F.Beiley)	Is of G. of Carponters
melicopoides (F.v.M.)	R.Br.)
Herberton (J.F. Bailey)	Citrus (Linn.)
Ranges, Rockingham Bay	inodora (Bail.) Russella
(J.Dallachy)	River Line, No
tetrandra (F.v.M.)	Harvey's Ch; RussellRv
Ranges about Rocking	Family Simarubeao (DG.)
han Bay (J.Doll.achy)	Ailanthus (Desf.)
Halfordia (F.y.M.)	imberbiflona (F.v.H.)
soleroxyla (F.v.M.) Kero-	Pt.Denison(F.v.M.)
seme-jaes.	Brucea (Mill.)
Herberton (J.F.Bailey)	symatrana(Roxb.) Mac-
Exelyn to Russell Rv. (	assar Kernol.
J.F.Bailey) Scrubs about	Rockingham Bay (F.v.l.)
Rockingham Bay(J.Dall.)	Samadera (Gaerth.)
Glycosmis (Corr.)	baileyana (Oliver)
pentaphylla (Corr.)	Bellenden Ker, at alt-
Islands of Torres St.	itude of 4,000ft.
Micromelum (Blumo)	Harrisonia (R.Br.)
pubescens (Blume)	brownii (A.Juss.)
Albany Is. (F.v.M.) G. of	Is of Goof Carpentaria
Carpentaria(R.BR.)Cape	Family Ochnaceae.
Upstart(M'Gillivray)	Brackenridgea (A.Gray)
Barnard Is. (M'Gillivray)	
Burdekin (F.v.M.)	Rockingham Bay(Dall.)
Murraya (Linn.)	Family Burseraceae
exotica (Linn.).	Garuga (Roxb.)
Is.of G.of Carpentaria	floribunda (Done,)
	Endeavour River.
	(To be continued)







# NORTH QUEENSLAND NATURALIST.

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Vol.1, No.11.

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#### PLATYPUS.

Recently Mr. Tex Turnley of Babinda and two swimming companions rescued two platypi from their entanglement in a fishing net across Babinda Creek. A third animal was not so fortunate. It was dead and this one was sent to the North Queensland Naturalist Club for stuffing. The two live animals had helped themselves by climbing to the top of the net where they could breathe and were almost human in the assistance they gave their rescuers to release them from the mesh. They held up their paws to be released, the while keeping their eyes shut. Subsequently one rose to the surface of the creek again perhaps seeking for the third member of their party. The stuffed platypus should be of great interest at the forth coming Wild Nature Show.

#### Page 2.

#### THE NORTH QUEENSLAND NATURALIST CLUB

Meeting Rooms: Motor Boat Club Rooms, Cairns.

General Meetings are held on the second Monday in each month and committee meetings are held on the first Monday, both meetings at 8 p.m.

A genda Paper -- Minutes, Correspondence, Reports Nominations and Election of Members (New Members are nominated at one meeting and elected by a ballott at the following monthly meeting)

Excursions - Members are invited to submit plans and suggestions for outdoor excursions to the meetings.

Exhibits - It is desired that members having interesting specimens to exhibit at general meetings shall also make a few explanatory remarks upon them and hand a written summary of the remarks to the Secretary (Mr.J.Wyer) for inclusion in the Club's books. This request is also made to the lecturers at the meetings.

Leoture and Adjournment -- After the ten minute interval, Mr. Bates will deliver a lecture on "Composition of Soils". Date of Meeting, August 14th, 1933

CLUB OFFICIALS. President, Dr. H. Flecker; Vice-Prosidents Capt. W. P. Fish and Miss Hooper; Secretary J Vyer; Executive Committee, the fore-going with the addition of M. J. Manski and W. M. Grant; Treasurer, R. J. Gorton; Editor and Librarian, Victor Kennedy

#### WILD NATURE SHOW.

held on Friday and Saturday August 25th and 26th, are in hand The various committees have been working towards getting a representative collection with a result that the Show promises to be very Successful. The Club's purposes is to gather as many plants, birds, animals, (alive or dead) shells corals, insects, minerals etc., as is possible. They will be distinctly Australian with special North Queensland characters. In addition to the exhibits there will be a series of moving pictures of the Reef and North Queensland mi croscopic studies of organisms and a display of native weapons and crafts. The Show will be held at the Oddfellows Hall, Cairns, and price of admission will be 1/- and children 6d, with a special concession of 3d per head for school children in groups and under the charge of teachers.

#### MEMBERSHIP

Messrs, Yardley and Harraway were elected to membership at the July meeting.

#### ADDENDA AND CORRIGENDA.

Vol.1, No.10, P.6

Calophyllum inophyllum, add localities
Dunk Island, Cardwell.

Aglaia elaeagnoidea, add locality Entrance Island; Endeavour Strait.

P.7
Delete Family Polygaleae (continued) next three lines should be inserted at top of second column, P.6. For Caprapa, read Carapa.

Micromelum pubescens add locality Cairnorss Island(Torres Straits). Brucea sumatrana add locality, Mt.Elliott.

#### CENSUS OF NORTH QUEENSLAND PLANTS (Continued)

```
Family Malpighiaceae
 lamily Burseraceae (Cont.)
                                  Ryssopterys (Blume)
   Canarium (Linn.)
                                    timorensis (Blume)
     australasicum (Kame)
                                      Cape Cleveland.
       Baţavia Rv. (Ward) Bloo-
                                Family Geraniaceae (Juss.)
       mfield Rv. (Roth.)
                                  Oxalis (Linn.)
     muelleri (Bailey) ElemiTree
                                    corniculata (Linn.)Creep-
       Bloomfield Riv:
                                     ing Wood Sorrel.
       Johnstone Rv(Bancroft)
                                      Burdekin (F.v.M.)
   Ganophyllum (Blume)
                                    sessilis (Hamilt.)
     falcatum (Blume).
                                      Musgrave Telegraph Stat
       Rockingham Bay; Pt.Den
                                      ion (Barclay-Millar)
                     -ison.
                                Family Malvaceae (Adams)
 Family Zygophyllaceae
                                  Sida (Linn.)
  Tribulus (Linn.)
                                    macropoda (F.v.M.)
     cistoides (Linn.) Dardatra
                                      G. of Carpentaria
       G. of Carpentaria; Penne-
                                    rhombifolia (Linn.)Sida-
       father Rv.; Lord Howick's
       Group(F.v.M.)Pt.Denison
                                                       weed
                                      Cairns District
      (Fitzalan)
                                   cordifolia(Linn.)var.mutie
    hystrix (R.Br.)
      Towards G. of Carpentaria
                                      Macarthur Rv; G. of Carp.
                                 Abutilon (Gaertn)Lantern-
    solandri (F.v.M.)Longarate
      Batavia Rv. (Roth.)Liz-
                                               flower
                                   lotocarpum (F.v.M)Desert
      ard Is. (M'Gill.) Endeav-
      our Rv. (Banks) GilbertRv. (#.v. Chinese Lantern
                                     Stokes Range on Gilbert
    augustifolius (Benth.)
      Is. of G. of Carpentario (R.
                                   graveolens (W.
      Endeavour Rv. (Britten( Br.
                                     Piper's Island
                                   muticum (G.Don)
   leptophyllus (Bailey)
                                     Source of the Burdekin
      Walsh Rv. (Barclay-Millar)
                                   cunninghamii (Benth.)
Family Linaceae
                                     Estuary of the Burdekin
 Hugonia (Linn.)
                                   indicum (G.Don)
    jenkinsii(F.v.M.)Katakarkal
                                     G. of Carpentaria; Green
      Daintree Rv. (Fitz.) Mour-
                                     Island; Pt. Denison
      ilyan Harbour(W.Mugford)
                                  Urena (Linne)
      Rockingham Bay (Dall.)
                                   armitiana (F.v.M.)
  Erythroxylon (Linn.)
                                     Etheridge River.
    ellipticum (R.Br.)
      Walsh River(Barclay-Millar)
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## Page 5.

Family Malvaceae (Cont.)	Thespesia (Corr)
Hibiscus (Linn.)	populnea (Corr) Indian
ficulnens (Linn.)Cooreenyan	Tulip-tree(Flowers
Cloncurry	May and June)
notho-manihot (F.v.M.)	
Rockingham Bay(Dallachy)	Is.of G. of Carpentaria
ROCKINGHam Day (Dallachy)	
brachysiphonius (F.v.M.)	Bombax (Linn.) -
Yi-awara (Both )	malabaricum, (De Cand.)
Batavia River (Roth.)	Silk-cotton tree.
microchlaenus (F.v.M.)	Mitchell River.
Cape River.	Family Sterculiaceae (Vent.)
zonatus (F.v.M.)	Sterculia (Linn.)
Is, of G. of Carpentaria	quadrifida (R.Br.)Ko-ral-b
elsworthii (F.v.M.)	Is.of Torres St.; Cape
Edgecombe Bay	Bedford; Cooktown; Atherto
divaricatus (Grah.) Ngar-	Pt.Denison; BurdekinDelta
golly	laurifolia (F.v.M.)
Cloncurry.	Rockingham Bay (Dallachy
vitifolius (Linn.)	Brachychiton (Schott)
Palm Islands	garrawayae (Bail.) Morna.
panduriformis (Burm.)	Flower about March.
Bee-allo	Palmer River (Roth.)
Mitchell River (Palmer)	ramiflora (Benth.) An-ji-ur
normani (F.v.M.)	Princess Charlotte Bay
Endeavour Rv. (Britten)	(Roth)
Fitzroy Is; C. Grafton;	vitifolia (Bail.)
Palm Island.	Laura (Barclay-Millar)
sturtii (Hook)	trichosiphon (Benth.)
Fitzroy Is; Burdekin Rv.	Broad-leaved BottleTre
tiliacens (Linn.)Cotton-	Burdekin River.
tree	populneus (R.Br.) Currajong
Is.of Bay of Carpentaria	Palmer River(Roth.)
Batavia Rv; Cooktown;	candata (Howard) Kel-lan
Green Is; Cairns; Dunk	Princess Charlotte Bay
Is; Lower Tully River	(Roth.)
Lagunaria (G.Don)	Tarrietia (Blume)
patersoni (Don) var. bract-	argyrodendron (F.v.M)var.
eata Dt Domison	grandiflora (Benth.)
Pt.Denison	Pt.Denison
Fugosia (Juss)	var angustifolia (Bailey
australia (Benth.)	Endeavour River.
G.of Carpentaria	

Page 6.	
argyrodendrum (Cont.)	Chart a (Chart 1)
Tarrietia	Grewio (Contd.)
	pleiostigma (F.v.M.)
var peralata (Bailey) Crow's Foot Elm.	Mulgrave River; Rocking
Upper Barron River	ham Bay (Dal-lachy)
Johnstone River	Triumfetta (Linn.)
Kleinhovia (Linn.)	procumbens (Forst.)
hospita (Linh.)	Cape York; Howick's
Near Pt. Douglas	Is; Fitzroy Island;
Helicteres (Linn.)	Frankland Islands.
Semical object (Fig. )	appendiculata (F.v.M.)
Semiglabra (F.v.M.)	Sweers Island; G. of Car
Rockingham Bay (Dall.)	entaria(J.F.Bailey)
Melhania (Forsk.)	pilosa (Roth)
incana (Heyne)	Mt. Elliott
Pt. Denison; Burdekin	rhomboidea(Jacq.)Chinese
River.	Burr(Introduced)
Waltheria (Linne)	Cooktown: Cairns; Townsv.
americana (Linne)	nigricans (Bail.) ille
Pt.Denison	Herberton&Tully River
Commersonia (Forst.)	(J.F.Bailey)
leichhardtii (Benth.)	Corchorus (Linn.)
Rockingham Bay; Cape	hygrophilus (A.Cunn.)
River.	Cleveland Bay(A.Cunn.)
echinata(Forst.) Brown	trilocularis (Linn.)
Currajong.	Rockingham Bay(F.v.M)
Cape York; Endeavour Rv.	Burdekin River. (F.v.M.)
Family Tiliaceae (Juss.)	acutangulus (Lam.)
Berrya	Cape York
ammonilla (Roxb.)var.	pumilio (R.Br.)
rotundifolia	Is.of G.of Carpentaria
Torres Straits Islands	(R.Brown)
Cape York.	sidoides (F.v.M.)
Grewia (Linn.)	Is.of G.of Carpentaria
orientalis (Linn.)	Sloanea (F.v.M.)
Is of G. of Carpentaria	langii (F.v.M.)
var latifolia (Benth.)	Herberton scrubs &Tully
Pt.Denison(Fitzalan)	River (J.F.Bailey)
polygama (Roxb.) Koolin	macbrydei (F.v.M.)
Is. of G. of Carp; Sweers	Rockingham Raw(Dall)
Is; Cape York; Butchers	Rockingham Bay(Dall.) australis(F.v.M.)Maiden's
Hill; Cloncurry; Cleveland	hluch Taken's
Cleveland Bay; Pt. Denison	blush Timber.
The state of the s	Herberton scrubs(Bail.)
	Rockingham Bay(F.v.M.)

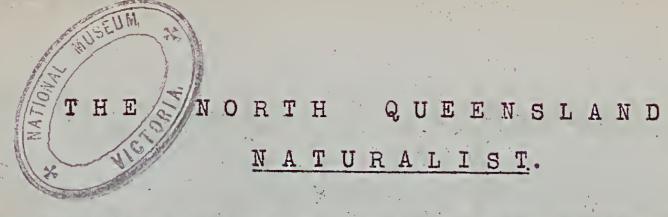
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Phyllanthus (Cont.) dallachyanus (Benth.) Rockingham Bay (Dall) Farfhernrohrii (F.v.M.) Sand Spurge, Walsh'F (Burton) Rockingham Bay(J.Dal Cleveland Bay (A. Cunn hebecarpus (Benth.) Burdekin River(F.v.M simplex (Return) Is. of Torres Straits (Bailey) Endeavour Rv. (A. Cunn Rockingham Bay(Dalla hyps\_opodius (F.v.A.) Russell Rv. (S. Johnso buxifolius (Reinw.) Estuary of Burdekin (Fitzalan) Glochidion (Forst.) ferdinandi (Muell-Arg. Jow-war. Is. of G. ofCarp(R. Bro Fitzroy Is. (M'Gill.) Rockingham Bay(W.Hil Dallachy): var. supra -axilla (Benth.) Rockingham Bay(Dall. var. mollis (Benth Rockingham Bay (Dall Neoroepera (Muell Arg.) buxifolia (Muell.Arg.) Lizard Island(Walter Endeavour River (A. Cunningham) (To be continued.)







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ROCK PYTHON AND GREEN TREE SNAKE.

At the recent Wild Nature Show, a rock python (Python amethystinus) and a very much smaller green tree snake, (Dendrophis punctulatus) were placed in the same cage for exhibition purposes, and during the first day each reptile occupied opposite corners. Many people, no doubt, were of opinion, that the smaller snake would find its way inside the latter.

Next day, however, the big python moved over to the corner occupied by the smaller animal, and at times the latter was not to be seen, so that it seemed possible that the prediction had eventuated as forecasted, but at intervals part of the green tree snake was seen, and there was no doubt he was capable of moving away if he so desired. Evidently he enjoyed being overlain or cuddled by the big monster, and was not crushed or otherwise harmed by this procedure. The big snake, moreover did not make a meal of its smaller mate.

## THE NORTH QUEENSLAND NATURALISTS CLUB

Meeting Rooms; Motor Boat Club Rooms, Cairns

General Meetings are held on the second Monday in each month and committee meetings are held on the first Monday, both meetings at 8 p.m.

Agenda Paper -- Minutes, Correspondence, Reports, Nomination and Election of Members (New Members are nominated at one meeting and elected by a ballott at the following monthly meeting.)

Excursions -- Members are invited to submit plans and suggestions for outdoor excursions to the meetings.

Exhibits — It is desired that members having interesting specimens to exhibit at general meetings shall also make a few explanatory remarks upon them and hand a written summary of the remarks to the Secretary (Mr.J.Wyer) for inclusion in the Club's books. This request is also made to lecturers at the meetings.

the Annual General Meeting will be held on Monday Geptember 11th, at 8 p.m.

TEUB OFFICIALS: President, Dr. H. Flecker: Viceresident, Capt. W. P. Fish and Miss Hooper: Secretary Wyer: Executive Committee, the fore-going with the Idition of M.J. Manski and W. M. Grant; Treasurer J. Gorton; Editor and Librarian, Victor Kennedy.

## EXHIBITS.

The following were exhibited at the August meeting of the Club --

BLIND SNAKE - Typhlops proximus (Waite) harles Barrett C.M.Z.S. states "Of all snakes, the blind nes are the most primitive. Their eyes are dark spots, heir teeth reduced to two are microscopic and the minute rescent shaped mouth is placed like that of a shark under the head. They have a glassy appearance, due to smooth olished scales and slip easily through sand and loose oil. Often they inhabit ant-nests, many are dug up in gardns or revealed by the plough. These dwellers underground tre harmless. A common species, ranging from Central Queensand to Victoria is the olive-brown or yellowish colored Typhlops proximus which grows to a length of twenty inches everal other kinds are much smaller. Blind snakes feed pon ants, ants' eggs, (larvae) other small insects and their Taken at Gordonvale-1931- By E. ALLEN arvae.

RED NAPED SNAKE. Pseudelaps diadema (Schegel)

By E. ALLEN

Xylocopa bryorum (Carpenter Bees) Exh. by M.J.MANSKI GREEN TREE SNAKE. -Dendrophis punctulatus.

. (Not full grown)

olid toothed, non-venemous, practically harmless. Lives in rees and feeds mainly on birds and their eggs. When ully grown may reach six feet in length.

Exhibited by E.ALLEN, Gordonvale. 1933.

SMALL WATER FERN. Ceratopteris thalictroides.

Exhibited by DR. FLECKER.

VIOLA (?) betonicaefolia (Sm.)
resented by MR.CURRY, who has them growing at Lake
arrine. He states he procured them at the back of Cardwell
he only locality which Bailey gives for this is "near
risbane."

WATER BUG. Lethocerus indicus (Lep.& Serv.) redatory insects; prey upon small fishes and larvae of quatic insects; attracted to lights.

Exhibited by E. ALLEN.

Page. 4.

Two eggs, of a dirty brown colour, with a rather soft skin, and somewhat larger than fowl's eggs were brought in for examination. It was thought that they might be eggs of the rock python. An x-ray view showed the long vertebral column and tail of a reptile but as they also possessed two pairs of limbs, they evidently belong to a large lizard, probably the common monitor, the "goana", (V aranus).

## ADDENDA AND CORRIGENDA.

Vol.1, No.9. P.6 Before Family Magnoliaceae insert-Family Myristiceae

Myristica (Linn.)

insipida (R.Br.) Queensland Nutmeg.
Is.of G.of Carp.) R.Br.) Albany Island (W. Hill) Endeavour Rv. (B.&. Sol.) Barron Rv. (J.F.Bail.) Green Is.; Tully Rv. (J.F.Bail.) Rockingham Bay (J.Dallachy)

Vol.1.No 11. P.4

For Tribulus augustifolius read T. angustifolius.

P.5. For Hibiscus ficulnens read H.ficulneus.
For H.tiliacens read H. tiliaceus.
For Fugosia australia read F. australis
For Brachychiton candata read B.caudata

First two lines should read Tarrietia argyrodendron (Cont.)
After Berrya, insert (Roxb.)

For Grewio (second column ) read Grewia.

Johnstone River Almond.

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Family Euphorbiaceae (Cont.)
                               Petalostigma quadriloculare
  Neoroepera (cont.)
                                               (Cont.)
    banksii (Benth.)
                                        Somerset; Endeavour Rv.
      Sandy ridges, North Shore
                                        (A.Cunn.) Pt.Denison;
      E ndeavour Rv. (A .Cunn.)
                                        Edgecombe Bay.
  Flueggea (Willd.)
                                          var.glabrescens, Bent.
    microcarpa (Blume) Thargin-
                                        C.Sidmouth (Curdie)
                           yah.
                                   Hemicyclia (Wight et Arn.)
      Sweers Island (Henne)
                                     australasica (Muell.Arg.)
      Is. of G. of Carp. (R. Brown)
                                        Is. of Torres St. (Henne)
      Flinders Rv. (Sutherland)
                                        Rockingham Bay(Dall.)
      Gilbert Rv. (F.v.M.) Mitch-
                                        Cleveland Bay (Bowman)
      ell Rv; Palmer Rv.; Cape
                                        Edgecombe Bay(Dall.)
      York(M'Gill.)Howick'sGroup
                                        Burdekin Rv. (F.v.M.)
      (F.v.M.) Cooktown(Roth.)
                                  Dissiliaria (F.v.M.)
      Rockingham Bay (Dallachy)
                                     tricornis (Benth.)
      Pt. Denison; Edgecombe Bay
                                        Rockingham Bay(Dall.)
     Cloncurry.
                                   Bischoffia (Blume)
    lecopyrus (Willd.)
                                     javanica (Blume)
      Gilbert River.
                                       . Rockingham Bay
 Breynia (Forst.)
                                   Antidesma (Linn.)
    cernua (Muell.Arg.)
                                     ghaesembilla (Gaertn.)
      Cape York (Daemel)
                                        Walsh Rv. (Barclay-Mil
    oblongifolia (Muell.Arg.)
                                        -ler)
                 Willgar.
                                     dallachyanum (Bail.)Her-
      Cape York (Daemel)
                                                bert Riv.Cherry
    stipitata (Muell.Arg.)
                                        Cape Grafton, (Roth.)
      Is. of G. of Carp. (R.Br.)
                                        Tully Rv; Rockingham.
      (Henne); Prince of Wales
                                        Bay (Dallachy)
      Is. (R.Brown) Barron Rv. (
                                     parvifclium (F.v.M.)
     E.C owley) Rockingham Bay
                                       Gilbert Rv.; Barron Rv;
      (Dall.) Cleveland Bay
                                        Pt.Denison.
      (Bowman).
                                     erostre (F.v.M.)
 Petalostigma (F.v.M.)
                                        Cairns; Rockingham Bay
    quadriloculare (F.v.M.)
                                       (Dallachy)
          Bitter Crab.
                                     sinatum (Benth.)
      Is.of G.of Carp. (Henne)
                                        Cairns; Rockingham Bay
     Albany Island (W. Hill)
                                        (Dallachy).
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Aleurites (Forst.) Claoxylon (Cont.) moluccana (Willd.) Candle hillii (Benth.) Cooktown; Barron nut Albany Is. (W.Hill) Cape Rv; Green Is; Rockingham B. York (M'Gilla, Daemel) Croton (Linn.) Bellenden Ker Range (Bail.) insularis (Baill.) Queens-Rockingham Bay (Eallachy) land Cascarilla Bark. Acalypha (Linn.) Rockingham Bay(Dallachy) indica (Linn.) Burdekin River (F.v.M.) var.australis (Bailey) phebalioides (F.v.M.) Walsh River(Muell.Arg.) Burdekin River (F.v.M.) Scrub on the Burdekin(F.v.M Pt.Denison, (Fitzalan) Mallotus (Lour.) Edgecombe Bay (Dallachy) ricinoides (Muell.Arg.)Barrverreauxii (Bailey) inya. Is. of Go. of Carpentaria - Cairns; Rockingham Bay triacros (F.v.M.) (Dal.) Mt. Elliott (Fitz.) Rockingham Bay(Dallachy) paniculatus (Muell.Arg.) arnhemicus (Muell.Arg.) Rockingham Bay (Dallachy) Is.of G.of Carp. (R.Brown) claoxyloides (Muell.Arg.) var.urenàefolius Lizard Is. (A. Cunningham) Cape York (M'Gillivary) var.macrophylla(Benth) Gilbert Rv. (Daintree) Rockingham Bay(Dallachy) Harvey's Ck; Russell Rv; philippensis (Muell.Arg.) Pt.Denison; Edgecombe Bay Kamela-tree. Codiaeum (Rumph) Rockingham Bay and Edgevariegatum (Blume) combe Bay (Dallachy) var.moluccana(Muell.Arg angustifolius (Benth.) Mt.Elliott & Seaview Rockingham Bay(Dallachy) Range, Rockingham Bay(Dall) polyadenus (F.v.M.) Baloghia (Endl. Cape York (W.Hill) Rockucida (Benth.) Scrub Bloodingham Bay (Dallachy) Rockingham Bay. Wood repandus (Muell: Arg.) Fortainea, (Heckel) Rockingham Bay(Dallachy) pancheri (Heckel) nesophilus Albert River Albany Is; (W.Hill) Cape Cleoxylon (A: Juss.) York (Daemel) Macaranga (Thon.) angustifolium (Muell.Arg.) dallachyi (F.v.M.) Pt.Denison (Fitzalan) Rockingham Bay (Dallachy) enerifolium (F.v.M.) subdentata (Benth.) Cleveland Bay (Bowman) Rockingham Bay (Dallachy)

aranga (Cont.) Family Urticaceae (Vent.) namoena (F.v.M.) Celtis (Linn.) Rockingham Bay (Dallachy) philippinensis (Blanco) nvolucrata (Bailley) Is.of G.of Carp.(R.Br.) Cape York (Daemel) Endea-Pt.Denison(Fitz.Dall.) vour Rv. (A.Cunn.) Rockpaniculata (Planch.) ingham Bay(Dall.) Mt. Investigator Tree. Elliott (Dallachy) Is.of G.of Carp. (R.Br.) anarius (Muell.Arg.) (Herme) Tumkullum Endeavour Rv. (A.Cunn.) Rockingham Bay (Dallachy) Pt.Denison&Eagecombe Howick's Group; Pt. Deni-Bay (Dallachy) son (Dallachy) Trema (Lour.) var.tomentosa (Muellaspera (Blume) Peach-leaved Arg.) Poison-tree Rockingham Bay (Dallachy) Rockingham By; BurdekinRy. igia (Linn.) orientalis (Blume) lovae-hollandiae (Muell. Albany Is. (W.Hill) Pt. Arg.) Denison(Fitzalan-Dall.) (Twining nettles) amboinensis (Blume)Birula Rockingham Bay (Dall.) Rockingham Bay (Dall.) lalanthus (A.Juss.) Aphananthe (Planch.) opulifolius (Grah.) philippinensis (Planch,) Rockingham Bay (Dallachy) Mallban. halea (Linn.) Barron Rv; Rockingham lueenslandiae (Bail.) Bay (Dallachy) Harvey's Cr; I Johnstone Malaisia (Blanco) River. tortuosa (Blanco) Deng-ulcaecaria (Linn.) Rockingham and ka. gallocha (Linn.)Milky Edgecombe Bays.Burdekin River. Mangrove Is. of G. of Carp. (R. Brown) Psuedomorus (Bureau) Parvifolia (Muell.Arg.) brunoniana (Bureau) Gutta-percha tree. Rockingham Bay (Dall.) G. of Carpentaria (R. Brown) Ficus (Linn.) (F.v.M., Landsborough.) colossea (F.v.M.)Ban-na-bool-ka Cloncurry (Palmer) Cooktown(Roth.)Rockly Balanophoreae ingham Bay(Dall.) Herb-T College programmes. ert River . (Dallachy) Lanophora (Forst.) pilosa (Reinw.) Burrowa australiana (F.v.M.) Albany Is; Cape York Rockingham Bay (Dallachy) (F: v.M.)

Ficus platypoda (Cont.) Ficus pilosa (Contd.) var, subacuminata Somerset (F.M.Bailey) Green Is; C. Grafton; Rock-Whitsunday Is. (Henne) dictyophleba (F.v.M.) ingham Bay (Dallachy) Is.off Cape Flattery(F. glabella (Bl.) var.papuana (King) cylindrica (Warb.) Edge of forest, Upper Is. of G. of Carp. ) R. Brown) Barron Rv. (L. Diels.). (Gulliver) magnifolia (F.v.M.) Rockingham Bay (Dallachy) Rockingham Bay(Dallachy parkinsoni (Hiern.) Booby Is. (Banks & Sol.) (Fitz.) Mt.Elliott(Dal.F. ehretioides (F.v.M.) Magur henneana (Mig.) Tully River(Roth.)Rock-Booby Is: (A.Cunn., Henne) Rockingham Bay(Dallachy) ingham Bay (Dallachy) virginea (Banks & Sol.) scandens (Roxb.) Booby Is. (Banks & So.) var australis (Bailey) infectoria (Roxb.) Mooleeah. Range about Kamerunga Green Is: Cairns: Lake (Nugent) Barrine; Rockingham Bay(Dal.) leptoclada (Benth.) pritzelii (Warb.) Rockingham Bay (Dall.) Upper Barron Rv., 1660ft. depressa (Benth.) above sea-level (L.Diels.) Mt. Elliott, (Fitzalan) validinervis (F.v.M.) phillippinensis (Miq.) Rockingham Bay (Dallachy) Family Is; Rockingham thynneana (Bail.) Queensland Bay (Dallachy) mollior (F.v.M.) Banyan. Cape Grafton. Rockingham Bay (Dallachy cairnsii (Warb.) pinkiana (F.v.M.) Not far from Cairns(L.Diels) Bellenden Ker Range (Bail eugenioides (F.v.M.) Tilgul stenocarpa (F.v.M.) Ke-ril Alabany Is; (F.v.M.) Atherton. Fitzroy Is. (Walter) Cape leucotricha (Miq.) Grafton; Rockingham Bay Is. of G. of Carp. (R. Brown) (Dallachy) platypoda (A.Cunn.) scabra (G. Forst.) Rough Fig var. petiolaris (Benth.) Cleveland Bay (Thozet) Kunnen orbicularis (A.Cunn) Mo-i C.Cleveland; Pt.Denison Batavia River(Roth.) (Fitzalan) aculeata (A.Cunn.) var.mollis (Benth.) Is. of G. of Carp. (R. Brown Rockingham Bay (Dallachy) (Henne, Gulliver.) To be continued.

